



# Safety Data Sheet

Issue Date: 01-Feb-2012

Revision Date: 12-Jan-2016

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** 511 Impregnator

### Other means of identification

**SDS #** MSC-010R

**Product Code** OMB No. 1218-0072

### Recommended use of the chemical and restrictions on use

**Recommended Use** Water, Stain & Slip Protection for: Quarry Tile, Ceramic Tile, Porcelain Tile, Glazed Tile, Marble, Granite, Travertine, Slate, Grout, Quartz, Brick, Terrazzo.

### Details of the supplier of the safety data sheet

#### Supplier Address

Miracle Sealants Company  
12318 Lower Azusa Road  
Arcadia, CA 91006

### Emergency Telephone Number

**Company Phone Number** 1-626-443-6433 (Phone)

1-626-443-1435 (Fax)

**24 Hour Emergency Phone Number** 1-800-350-1901

**Emergency Telephone (24 hr)**

For product spills, leaks or exposures call:

Infotrac 1-800-535-5053 (North America) or 1-352-323-3500 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear, colorless liquid

**Physical state** Liquid

**Odor** Aromatic

### Classification

|  |            |
|--|------------|
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity                                | Category 1 |
| Flammable Liquids                                  | Category 3 |

### Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

### Signal Word

**Danger**

### Hazard statements

May be fatal if swallowed and enters airways

Causes damage to organs through prolonged or repeated exposure

Flammable liquid and vapor

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Do not induce vomiting  
 IN CASE OF FIRE: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No.     | Weight-%    |
|---------------|-------------|-------------|
| Proprietary   | Proprietary | Proprietary |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST AID MEASURES

**First Aid Measures**

|                       |  |
|-----------------------|--|
| <b>General Advice</b> | Provide this SDS to medical personnel for treatment.   |
| <b>Eye Contact</b>    | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.   |
| <b>Skin Contact</b>   | Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.   |
| <b>Inhalation</b>     | If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical attention.  |
| <b>Ingestion</b>      | If swallowed, do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. |

**Most important symptoms and effects****Symptoms**

Eyes: May cause eye irritation  
Skin: May cause mild skin irritation; drying of the skin.  
Ingestion: May cause vomiting, nausea and diarrhea.  
Inhalation: Excessive inhalation causes headache, dizziness, nausea and incoordination.

Medical conditions aggravated: Respiratory, pulmonary, liver and kidney disorders. Central nervous systems disorders. Gastrointestinal disorders.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Medical conditions generally aggravated by exposure- same as signs and symptoms of over exposure. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, water fog.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Product is flammable. Heat will cause phosgene gas.

**Explosion Data**

**Sensitivity to Static Discharge** Take precautionary measures against static discharge.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool exposed containers with water to prevent rupturing.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal Precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).  
Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area.

**Environmental precautions****Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**

Steps to be taken in case material is released or spilled: wipe, scrape or soak up in an inert material and put in a container for disposal. Use clean non-sparking tools to collect absorbed material. For waste disposal, see section 13 of the SDS.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Keep out of the reach of children. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use only with adequate ventilation. Keep container tightly closed. Ground container and transfer equipment to eliminate static electric sparks. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Keep cool. Do not breathe vapors or spray mist. Do not eat, drink or smoke when handling this product.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Precautions to be taken in handling and storing: use a ground strap. Store upright in a cool place below 77° F (25° C). Keep out of the reach of children. Store locked up.

#### **Incompatible Materials**

Strong oxidizers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

The following information is given as general guidance

### Appropriate engineering controls

#### **Engineering Controls**

Local exhaust: Recommended  
Mechanical exhaust: General ventilation system should be provided.

### Individual protection measures, such as personal protective equipment

#### **Eye/Face Protection**

Tight fitting, splash proof safety goggles.

#### **Skin and Body Protection**

Protective gloves: Plastic or rubber, chemical resistant  
Protective clothing or equipment: Chemical resistant clothing.

#### **Respiratory Protection**

Ventilate by opening all doors and windows. If exposure above the TLV or PEL require a NIOSH approved respirator equipped for the exposure or suitable respiratory protection per 29 CFR 1910.134 is required.

#### **General Hygiene Considerations**

Work hygienic practices: Wash hands thoroughly before handling foodstuffs, liquids or tobacco products. Use common sense and care around chemicals. Never mix this product with other chemicals. Consult your supervisor for all other hygienic and safety practices. All practices depend on your specific business. Directions for use normally found on label which will dictate engineering and control measures.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state**  
**Appearance**  
**Color**

Liquid  
Clear, colorless liquid  
Colorless

**Odor**  
**Odor Threshold**

Aromatic  
Not determined

#### Property

#### Values

#### Remarks • Method

pH

Neutral

Melting Point/Freezing Point

Not available

Boiling Point/Boiling Range

355-395 °F / 179.44-201.66 °C

Flash Point

51.66 °C / 125 °F

PCC

|                              |                |         |
|------------------------------|----------------|---------|
| Evaporation Rate             | <0.1           |         |
| Flammability (Solid, Gas)    | Not determined |         |
| Flammability Limits in Air   |                |         |
| Upper Flammability Limits    | 7%             |         |
| Lower Flammability Limit     | 1%             |         |
| Vapor Pressure               | 5 mmHg         | @ 20 C  |
| Vapor Density                | 5.3            | (Air=1) |
| Relative Density             | 0.80           |         |
| Water Solubility             | Insoluble      |         |
| Solubility in other solvents | Not determined |         |
| Partition Coefficient        | Not determined |         |
| Auto-ignition Temperature    | Not determined |         |
| Decomposition Temperature    | Not determined |         |
| Kinematic Viscosity          | Not determined |         |
| Dynamic Viscosity            | Not determined |         |
| Explosive Properties         | Not determined |         |
| Oxidizing Properties         | Not determined |         |

**Other Information**

|             |                               |
|-------------|-------------------------------|
| VOC Content | Less than or equal to 742 g/L |
| Density     | 798 Kg/M3                     |

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

|                                 |  |
|---------------------------------|--|
| <b>Hazardous Polymerization</b> | Hazardous polymerization does not occur. |
|---------------------------------|--|

**Conditions to Avoid**

Keep away from sources of ignition such as heat, sparks or open flames.

**Incompatible Materials**

Strong oxidizers.

**Hazardous Decomposition Products**

Carbon monoxide, carbon dioxide, silicone dioxide, fumes of xylene, aromatic and aliphatic hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Irritating to eyes.  |
| <b>Skin Contact</b> | Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.<br>May be harmful in contact with skin. |
| <b>Inhalation</b>   | May cause irritation if inhaled.   |
| <b>Ingestion</b>    | May be fatal if swallowed and enters airways. May cause irritation of gastrointestinal tract.                                    |

**Component Information**

| Chemical Name | ATEmix (oral)        | ATEmix (dermal)         | Inhalation LC50         |
|---------------|----------------------|-------------------------|-------------------------|
| Proprietary   | > 5000 mg/kg ( Rat ) | = 3000 mg/kg ( Rabbit ) | > 5.28 mg/L ( Rat ) 4 h |

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Component Information**

| Chemical Name | Algae/aquatic plants                                | Fish   | Crustacea                         |
|---------------|---|--|-----------------------------------|
| Proprietary   | 450: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 800: 96 h Pimephales promelas mg/L LC50 static | 100: 48 h Daphnia magna mg/L EC50 |

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

|                         |  |
|-------------------------|--|
| <b>Note</b>             | According to 49 CFR §173.150(f)(1), this material should be reclassified as "NA1993, Combustible Liquid, N.O.S." if it is shipped in bulk. DOT Ground: Combustible liquids are not regulated in non-bulk shipments per 49 CFR 173.150(f)(2). |
| <b>DOT</b>              | (If shipped in NON BULK packaging by ground transport)   |
| <b>IATA</b><br>UN/ID No | Please contact manufacturer for most current information<br>UN1268   |
| <b>IMDG</b><br>UN/ID No | Please contact manufacturer for most current information<br>UN1268   |

## 15. REGULATORY INFORMATION

### International Inventories

| Chemical Name | TSCA | DSL/NDL | EINECS/E LINC | ENCS | IECSC | KECL    | PICCS | AICS |
|---------------|------|---------|---------------|------|-------|---------|-------|------|
| Proprietary   | X    | X       | X             |      | X     | Present | X     | X    |

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINC** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire Hazard                       | Yes |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations****U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Proprietary   | X          |               |              |

**16. OTHER INFORMATION**

|                    |                       |                     |                         |                            |
|--------------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b><u>NFPA</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|                    | 2                     | 2                   | 0                       | None                       |
| <b><u>HMIS</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical hazards</b> | <b>Personal Protection</b> |
|                    | 2                     | 2                   | 0                       | Not determined             |

Issue Date: 01-Feb-2012

Revision Date: 12-Jan-2016

Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# Safety Data Sheet

Issue Date: 01-Feb-2012

Revision Date: 12-Jan-2016

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** 511 Impregnator

### Other means of identification

**SDS #** MSC-010R

**Product Code** OMB No. 1218-0072

### Recommended use of the chemical and restrictions on use

**Recommended Use** Water, Stain & Slip Protection for: Quarry Tile, Ceramic Tile, Porcelain Tile, Glazed Tile, Marble, Granite, Travertine, Slate, Grout, Quartz, Brick, Terrazzo.

### Details of the supplier of the safety data sheet

#### Supplier Address

Miracle Sealants Company  
12318 Lower Azusa Road  
Arcadia, CA 91006

### Emergency Telephone Number

**Company Phone Number** 1-626-443-6433 (Phone)

1-626-443-1435 (Fax)

**24 Hour Emergency Phone Number** 1-800-350-1901

**Emergency Telephone (24 hr)**

For product spills, leaks or exposures call:

Infotrac 1-800-535-5053 (North America) or 1-352-323-3500 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear, colorless liquid

**Physical state** Liquid

**Odor** Aromatic

### Classification

|  |            |
|--|------------|
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity                                | Category 1 |
| Flammable Liquids                                  | Category 3 |

### Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

### Signal Word

**Danger**

### Hazard statements

May be fatal if swallowed and enters airways

Causes damage to organs through prolonged or repeated exposure

Flammable liquid and vapor

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do not induce vomiting  
IN CASE OF FIRE: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name | CAS No.     | Weight-%    |
|---------------|-------------|-------------|
| Proprietary   | Proprietary | Proprietary |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST AID MEASURES****First Aid Measures**

|                       |  |
|-----------------------|--|
| <b>General Advice</b> | Provide this SDS to medical personnel for treatment.   |
| <b>Eye Contact</b>    | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.   |
| <b>Skin Contact</b>   | Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.   |
| <b>Inhalation</b>     | If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical attention.  |
| <b>Ingestion</b>      | If swallowed, do not induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. |

**Most important symptoms and effects****Symptoms**

Eyes: May cause eye irritation  
Skin: May cause mild skin irritation; drying of the skin.  
Ingestion: May cause vomiting, nausea and diarrhea.  
Inhalation: Excessive inhalation causes headache, dizziness, nausea and incoordination.

Medical conditions aggravated: Respiratory, pulmonary, liver and kidney disorders. Central nervous systems disorders. Gastrointestinal disorders.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Medical conditions generally aggravated by exposure- same as signs and symptoms of over exposure. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Dry chemical, CO<sub>2</sub>, water fog.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Product is flammable. Heat will cause phosgene gas.

**Explosion Data**

**Sensitivity to Static Discharge** Take precautionary measures against static discharge.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool exposed containers with water to prevent rupturing.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures****Personal Precautions**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area.

**Environmental precautions****Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**

Steps to be taken in case material is released or spilled: wipe, scrape or soak up in an inert material and put in a container for disposal. Use clean non-sparking tools to collect absorbed material. For waste disposal, see section 13 of the SDS.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Keep out of the reach of children. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use only with adequate ventilation. Keep container tightly closed. Ground container and transfer equipment to eliminate static electric sparks. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. Keep cool. Do not breathe vapors or spray mist. Do not eat, drink or smoke when handling this product.

### Conditions for safe storage, including any incompatibilities

#### **Storage Conditions**

Keep container tightly closed and store in a cool, dry and well-ventilated place. Precautions to be taken in handling and storing: use a ground strap. Store upright in a cool place below 77° F (25° C). Keep out of the reach of children. Store locked up.

#### **Incompatible Materials**

Strong oxidizers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

The following information is given as general guidance

### Appropriate engineering controls

#### **Engineering Controls**

Local exhaust: Recommended  
Mechanical exhaust: General ventilation system should be provided.

### Individual protection measures, such as personal protective equipment

#### **Eye/Face Protection**

Tight fitting, splash proof safety goggles.

#### **Skin and Body Protection**

Protective gloves: Plastic or rubber, chemical resistant  
Protective clothing or equipment: Chemical resistant clothing.

#### **Respiratory Protection**

Ventilate by opening all doors and windows. If exposure above the TLV or PEL require a NIOSH approved respirator equipped for the exposure or suitable respiratory protection per 29 CFR 1910.134 is required.

#### **General Hygiene Considerations**

Work hygienic practices: Wash hands thoroughly before handling foodstuffs, liquids or tobacco products. Use common sense and care around chemicals. Never mix this product with other chemicals. Consult your supervisor for all other hygienic and safety practices. All practices depend on your specific business. Directions for use normally found on label which will dictate engineering and control measures.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state**  
**Appearance**  
**Color**

Liquid  
Clear, colorless liquid  
Colorless

**Odor**  
**Odor Threshold**

Aromatic  
Not determined

#### Property

#### Values

#### Remarks • Method

pH

Neutral

Melting Point/Freezing Point

Not available

Boiling Point/Boiling Range

355-395 °F / 179.44-201.66 °C

Flash Point

51.66 °C / 125 °F

PCC

|                              |                |         |
|------------------------------|----------------|---------|
| Evaporation Rate             | <0.1           |         |
| Flammability (Solid, Gas)    | Not determined |         |
| Flammability Limits in Air   |                |         |
| Upper Flammability Limits    | 7%             |         |
| Lower Flammability Limit     | 1%             |         |
| Vapor Pressure               | 5 mmHg         | @ 20 C  |
| Vapor Density                | 5.3            | (Air=1) |
| Relative Density             | 0.80           |         |
| Water Solubility             | Insoluble      |         |
| Solubility in other solvents | Not determined |         |
| Partition Coefficient        | Not determined |         |
| Auto-ignition Temperature    | Not determined |         |
| Decomposition Temperature    | Not determined |         |
| Kinematic Viscosity          | Not determined |         |
| Dynamic Viscosity            | Not determined |         |
| Explosive Properties         | Not determined |         |
| Oxidizing Properties         | Not determined |         |

**Other Information**

|             |                               |
|-------------|-------------------------------|
| VOC Content | Less than or equal to 742 g/L |
| Density     | 798 Kg/M3                     |

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

|                                 |  |
|---------------------------------|--|
| <b>Hazardous Polymerization</b> | Hazardous polymerization does not occur. |
|---------------------------------|--|

**Conditions to Avoid**

Keep away from sources of ignition such as heat, sparks or open flames.

**Incompatible Materials**

Strong oxidizers.

**Hazardous Decomposition Products**

Carbon monoxide, carbon dioxide, silicone dioxide, fumes of xylene, aromatic and aliphatic hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Irritating to eyes.  |
| <b>Skin Contact</b> | Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.<br>May be harmful in contact with skin. |
| <b>Inhalation</b>   | May cause irritation if inhaled.   |
| <b>Ingestion</b>    | May be fatal if swallowed and enters airways. May cause irritation of gastrointestinal tract.                                    |

**Component Information**

| Chemical Name | ATEmix (oral)        | ATEmix (dermal)         | Inhalation LC50         |
|---------------|----------------------|-------------------------|-------------------------|
| Proprietary   | > 5000 mg/kg ( Rat ) | = 3000 mg/kg ( Rabbit ) | > 5.28 mg/L ( Rat ) 4 h |

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Component Information**

| Chemical Name | Algae/aquatic plants                                | Fish   | Crustacea                         |
|---------------|---|--|-----------------------------------|
| Proprietary   | 450: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 800: 96 h Pimephales promelas mg/L LC50 static | 100: 48 h Daphnia magna mg/L EC50 |

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

## 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

|                         |  |
|-------------------------|--|
| <b>Note</b>             | According to 49 CFR §173.150(f)(1), this material should be reclassified as "NA1993, Combustible Liquid, N.O.S." if it is shipped in bulk. DOT Ground: Combustible liquids are not regulated in non-bulk shipments per 49 CFR 173.150(f)(2). |
| <b>DOT</b>              | (If shipped in NON BULK packaging by ground transport)   |
| <b>IATA</b><br>UN/ID No | Please contact manufacturer for most current information<br>UN1268   |
| <b>IMDG</b><br>UN/ID No | Please contact manufacturer for most current information<br>UN1268   |

## 15. REGULATORY INFORMATION

### International Inventories

| Chemical Name | TSCA | DSL/NDL | EINECS/E LINC | ENCS | IECSC | KECL    | PICCS | AICS |
|---------------|------|---------|---------------|------|-------|---------|-------|------|
| Proprietary   | X    | X       | X             |      | X     | Present | X     | X    |

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINC** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire Hazard                       | Yes |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations****U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Proprietary   | X          |               |              |

**16. OTHER INFORMATION**

|                    |                       |                     |                         |                            |
|--------------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b><u>NFPA</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|                    | 2                     | 2                   | 0                       | None                       |
| <b><u>HMIS</u></b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical hazards</b> | <b>Personal Protection</b> |
|                    | 2                     | 2                   | 0                       | Not determined             |

Issue Date: 01-Feb-2012

Revision Date: 12-Jan-2016

Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

C1T354

## Section 1. Identification

**Product name** : DuraCraft™ Exterior Acrylic Latex, Flat  
Ultradeep Base

**Product code** : C1T354

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**

Not applicable.

**Manufacturer** : THE SHERWIN-WILLIAMS COMPANY  
101 W. Prospect Avenue  
Cleveland, OH 44115

**National contact** : The Sherwin-Williams Company  
418 North Service Road East  
Oakville, Ontario L6H 5R2 Canada

**Emergency telephone number of the company** : US / Canada: (216) 566-2917  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

**Product Information Telephone Number** : US / Canada: Not Available  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## Section 2. Hazards identification

**Classification of the substance or mixture** : CARCINOGENICITY - Category 1A  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1.1%  
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1.1%  
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1.1%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : May cause cancer.  
Causes damage to organs through prolonged or repeated exposure. (respiratory tract)

### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

### CAS number/other identifiers

| Ingredient name                 | % by weight | CAS number |
|---------------------------------|-------------|------------|
| Cristobalite, respirable powder | 1.06        | 14464-46-1 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

## Section 4. First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  
**Specific treatments** : No specific treatment.  
**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.  
**Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

| Ingredient name                 | Exposure limits   |
|---------------------------------|---|
| Cristobalite, respirable powder | <p><b>OSHA PEL Z3 (United States, 6/2016).</b><br/>TWA: 250 mppcf / 2 x (%SiO<sub>2</sub>+5) 8 hours.<br/>Form: Respirable<br/>TWA: 10 mg/m<sup>3</sup> / 2 x (%SiO<sub>2</sub>+2) 8 hours.<br/>Form: Respirable<br/>TWA: 30 mg/m<sup>3</sup> / 2 x (%SiO<sub>2</sub>+2) 8 hours.<br/>Form: Total dust</p> <p><b>OSHA PEL (United States, 6/2016).</b><br/>TWA: 50 µg/m<sup>3</sup> 8 hours. Form: Respirable dust</p> <p><b>ACGIH TLV (United States, 3/2016).</b><br/>TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p> <p><b>NIOSH REL (United States, 10/2016).</b><br/>TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: respirable dust</p> |

#### Occupational exposure limits (Canada)

| Ingredient name                 | Exposure limits   |
|---------------------------------|---|
| Cristobalite, respirable powder | <p><b>CA British Columbia Provincial (Canada, 7/2016).</b><br/>TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable</p> <p><b>CA Québec Provincial (Canada, 1/2014).</b><br/>TWA<sub>EV</sub>: 0.05 mg/m<sup>3</sup> 8 hours. Form: Respirable dust.</p> <p><b>CA Ontario Provincial (Canada, 7/2015).</b><br/>TWA: 0.05 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction.</p> <p><b>CA Alberta Provincial (Canada, 4/2009).</b><br/>8 hrs OEL: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable particulate</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/>TWA: 0.05 mg/m<sup>3</sup> 8 hours. Form: respirable fraction</p> |

#### Occupational exposure limits (Mexico)

| Ingredient name                 | Exposure limits  |
|---------------------------------|--|
| Cristobalite, respirable powder | <p><b>NOM-010-STPS-2014 (Mexico, 4/2016).</b><br/>TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p> |

### **Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Evaporation rate** : 0.09 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : 2.3 kPa (17.5 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 1.18
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.205 cm<sup>2</sup>/s (>20.5 cSt)
- Molecular weight** : Not applicable.

### Aerosol product

## Section 9. Physical and chemical properties

**Heat of combustion** : 1.278 kJ/g

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

| Product/ingredient name         | OSHA | IARC | NTP                             |
|---------------------------------|------|------|---------------------------------|
| Cristobalite, respirable powder | -    | 1    | Known to be a human carcinogen. |

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

| Name                            | Category   | Route of exposure | Target organs     |
|---------------------------------|------------|-------------------|-------------------|
| Cristobalite, respirable powder | Category 1 | Inhalation        | respiratory tract |

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**General** : Causes damage to organs through prolonged or repeated exposure.  
**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Not available.

## Section 12. Ecological information

**Toxicity**

Not available.

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

Not available.

## Section 12. Ecological information

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>DOT<br/>Classification</b> | <b>TDG<br/>Classification</b> | <b>Mexico<br/>Classification</b> | <b>IATA</b>    | <b>IMDG</b>    |
|-----------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.                | Not regulated.                | Not regulated.                   | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                             | -                             | -                                | -              | -              |
| <b>Transport hazard class(es)</b> | -                             | -                             | -                                | -              | -              |
| <b>Packing group</b>              | -                             | -                             | -                                | -              | -              |
| <b>Environmental hazards</b>      | No.                           | No.                           | No.                              | No.            | No.            |
| <b>Additional information</b>     | -                             | -                             | -                                | -              | -              |

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

**Proper shipping name** : Not available.

**Ship type** : Not available.

**Pollution category** : Not available.

## Section 15. Regulatory information

### [SARA 313](#)

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### [California Prop. 65](#)

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## Section 16. Other information

### [Hazardous Material Information System \(U.S.A.\)](#)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 0 |
| Physical hazards |   | 0 |
|                  |   |   |

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### [Procedure used to derive the classification](#)

| Classification   | Justification                            |
|--|--|
| CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) - Category 1 | Calculation method<br>Calculation method |

### [History](#)

|                                |  |
|--------------------------------|--|
| Date of printing               | : 1/26/2018  |
| Date of issue/Date of revision | : 1/26/2018  |
| Date of previous issue         | : 1/16/2018  |
| Version                        | : 3.02   |
| Key to abbreviations           | : ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |

### [Notice to reader](#)

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first

|                                |   |                        |             |                  |        |       |
|--------------------------------|---|------------------------|-------------|------------------|--------|-------|
| Date of issue/Date of revision | : 1/26/2018   | Date of previous issue | : 1/16/2018 | Version          | : 3.02 | 10/11 |
| C1T354                         | DuraCraft™ Exterior Acrylic Latex, Flat<br>Ultradeep Base |                        |             | SHW-85-NA-GHS-CA |        |       |

## Section 16. Other information

referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.



# SAFETY DATA SHEET

Issue Date 29-Nov-2015

Revision Date 29-Nov-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** ALUMINUM ROOF COATING

### Other means of identification

**Product Code** HE555FR

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coatings Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Company Phone Number** 800-486-1278

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |
| Flammable liquids                                | Category 3  |

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor

**Appearance** viscous**Physical state** liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**Unknown acute toxicity**

24.67952% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable

**Mixture**

| Chemical Name                                  | CAS No     | Weight-% |
|--|------------|----------|
| Solvent naphtha, petroleum, medium aliphatic * | 64742-88-7 | 15 - 40  |
| Asphalt *                                      | 8052-42-4  | 15 - 40  |

|  |            |         |
|--|------------|---------|
| Aluminum *                                   | 7429-90-5  | 10 - 30 |
| Perlite *                                    | 93763-70-3 | 5 - 10  |
| Glass, oxide, chemicals *                    | 65997-17-3 | 1 - 5   |
| Benzene, 1,2,4-trimethyl- *                  | 95-63-6    | 1 - 5   |
| Solvent naphtha, petroleum, light aromatic * | 64742-95-6 | 1 - 5   |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).  |
| <b>Eye contact</b>                        | Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.      |
| <b>Skin contact</b>                       | Wash off immediately with plenty of water.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician. |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.  |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition.  |

##### Most important symptoms and effects, both acute and delayed

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness. |
|-----------------|---|

##### Indication of any immediate medical attention and special treatment needed

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Flammable.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

|                             |   |
|-----------------------------|---|
| <b>Personal precautions</b> | Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate |
|-----------------------------|---|

ventilation, especially in confined areas. Use personal protective equipment as required.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical Name  | ACGIH TLV   | OSHA PEL   | NIOSH IDLH  |
|--|---|--|---|
| Solvent naphtha, petroleum, medium aliphatic<br>64742-88-7 | -   | TWA: 500 ppm<br>TWA: 2900 mg/m <sup>3</sup>  | -   |
| Asphalt<br>8052-42-4                                       | TWA: 0.5 mg/m <sup>3</sup> benzene soluble aerosol fume, inhalable fraction   | -  | Ceiling: 5 mg/m <sup>3</sup> fume 15 min  |
| Aluminum<br>7429-90-5                                      | TWA: 1 mg/m <sup>3</sup> respirable fraction  | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust<br>TWA: 5 mg/m <sup>3</sup> Al |
| Perlite<br>93763-70-3                                      | -   | -  | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust                                |
| Glass, oxide, chemicals<br>65997-17-3                      | TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination<br>TWA: 5 mg/m <sup>3</sup> inhalable fraction | -  | -   |
| Benzene, 1,2,4-trimethyl-<br>95-63-6                       | -   | -  | TWA: 25 ppm<br>TWA: 125 mg/m <sup>3</sup>   |

NIOSH IDLH Immediately Dangerous to Life or Health

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

|                                       |   |
|---------------------------------------|---|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b>       | Wear protective gloves and protective clothing.   |
| <b>Respiratory protection</b>         | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| <b>General Hygiene Considerations</b> | When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.  |

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                                       |                          |                                  |                          |
|---------------------------------------|--------------------------|----------------------------------|--------------------------|
| <b>Physical state</b>                 | liquid                   | <b>Odor</b>                      | Solvent                  |
| <b>Appearance</b>                     | viscous                  | <b>Odor threshold</b>            | No information available |
| <b>Color</b>                          | silver black             |                                  |                          |
| <b>Property</b>                       | <b>Values</b>            | <b>Remarks • Method</b>          |                          |
| <b>pH</b>                             | No information available |                                  |                          |
| <b>Melting point / freezing point</b> | No information available |                                  |                          |
| <b>Boiling point / boiling range</b>  | > 150 °C / 302 °F        |                                  |                          |
| <b>Flash point</b>                    | 42 °C / 108 °F           | Pensky-Martens Closed Cup (PMCC) |                          |
| <b>Evaporation rate</b>               | No information available |                                  |                          |
| <b>Flammability (solid, gas)</b>      | No information available |                                  |                          |
| <b>Flammability Limit in Air</b>      |                          |                                  |                          |
| <b>Upper flammability limit:</b>      | 6                        |                                  |                          |
| <b>Lower flammability limit:</b>      | 1                        |                                  |                          |
| <b>Vapor pressure</b>                 | No information available |                                  |                          |
| <b>Vapor density</b>                  | 3.6                      |                                  |                          |
| <b>Relative density</b>               | 1 - 1.1                  |                                  |                          |
| <b>Water solubility</b>               | Insoluble in water       |                                  |                          |
| <b>Solubility in other solvents</b>   | No information available |                                  |                          |
| <b>Partition coefficient</b>          | No information available |                                  |                          |
| <b>Autoignition temperature</b>       | >250 °C / 482 °F         |                                  |                          |
| <b>Decomposition temperature</b>      | No information available |                                  |                          |
| <b>Kinematic viscosity</b>            | > 100 mm <sup>2</sup> /s | @ 40 °C                          |                          |
| <b>Dynamic viscosity</b>              | No information available |                                  |                          |
| <b>Explosive properties</b>           | Not an explosive         |                                  |                          |
| <b>Oxidizing properties</b>           | Not applicable           |                                  |                          |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | May cause irritation of respiratory tract. May cause drowsiness or dizziness. |
| <b>Eye contact</b>  | Irritating to eyes.   |
| <b>Skin contact</b> | Irritating to skin.   |
| <b>Ingestion</b>    | No data available.  |

| Chemical Name  | Oral LD50            | Dermal LD50             | Inhalation LC50                   |
|--|----------------------|-------------------------|-----------------------------------|
| Solvent naphtha, petroleum, medium aliphatic<br>64742-88-7 | > 5000 mg/kg ( Rat ) | = 3000 mg/kg ( Rabbit ) | > 5.28 mg/L ( Rat ) 4 h           |
| Asphalt<br>8052-42-4                                       | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | -                                 |
| Benzene, 1,2,4-trimethyl-<br>95-63-6                       | = 3280 mg/kg ( Rat ) | > 3160 mg/kg ( Rabbit ) | = 18 g/m <sup>3</sup> ( Rat ) 4 h |
| Solvent naphtha, petroleum, light aromatic<br>64742-95-6   | = 8400 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | = 3400 ppm ( Rat ) 4 h            |

**Information on toxicological effects**

**Symptoms** May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Vapors may cause drowsiness and dizziness.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                         | ACGIH | IARC     | NTP | OSHA |
|---------------------------------------|-------|----------|-----|------|
| Asphalt<br>8052-42-4                  | -     | Group 2B | -   | X    |
| Glass, oxide, chemicals<br>65997-17-3 | -     | Group 3  | -   | -    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** Target Organs. Respiratory system. Eyes. Skin. Central nervous system.

**STOT - repeated exposure** No information available.

**Chronic toxicity** May cause adverse effects on the bone marrow and blood-forming system.

**Target Organ Effects** Eyes, Respiratory system, Skin, blood, Central nervous system, kidney.

Aspiration hazard No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5,252.00 mg/kg  
ATEmix (dermal) 2,573.00 mg/kg  
ATEmix (inhalation-dust/mist) 67.40 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Harmful to aquatic life with long lasting effects

65.68642 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

| Chemical Name                        | Partition coefficient |
|--------------------------------------|-----------------------|
| Asphalt<br>8052-42-4                 | 6                     |
| Benzene, 1,2,4-trimethyl-<br>95-63-6 | 3.63                  |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

| Chemical Name         | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| Aluminum<br>7429-90-5 | Ignitable powder                  |

**14. TRANSPORT INFORMATION**

**DOT** Not regulated (If shipped in NON BULK packaging by ground transport)

**TDG** Not regulated (If shipped in NON BULK packaging by ground transport)

**IATA**

UN/ID no UN1999  
Proper shipping name Tars, liquid  
Hazard Class 3  
Packing Group III  
ERG Code 3L  
Special Provisions A3  
Description UN1999, Tars, liquid, 3, III

|                             |   |
|-----------------------------|---|
| <b>IMDG</b>                 | Non-regulated per 2.3.2.5                 |
| <b>UN/ID no</b>             | UN1999                                    |
| <b>Proper shipping name</b> | Tars, liquid                              |
| <b>Hazard Class</b>         | 3   |
| <b>Packing Group</b>        | III                                       |
| <b>EmS-No</b>               | F-E, S-E                                  |
| <b>Special Provisions</b>   | 955                                       |
| <b>Description</b>          | UN1999, Tars, liquid, 3, III, (42°C c.c.) |

## 15. REGULATORY INFORMATION

### International Inventories

|                      |          |
|----------------------|----------|
| <b>TSCA</b>          | Complies |
| <b>DSL/NDL</b>       | Complies |
| <b>EINECS/ELINCS</b> | Complies |
| <b>IECSC</b>         | Complies |
| <b>KECL</b>          | Complies |
| <b>PICCS</b>         | Complies |
| <b>AICS</b>          | Complies |

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                       | SARA 313 - Threshold Values % |
|-------------------------------------|-------------------------------|
| Aluminum - 7429-90-5                | 1.0                           |
| Benzene, 1,2,4-trimethyl- - 95-63-6 | 1.0                           |

#### SARA 311/312 Hazard Categories

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire hazard</b>                       | Yes |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|---------------|---------------------------|
|---------------|---------------------------|

|                     |            |
|---------------------|------------|
| Cumene - 98-82-8    | Carcinogen |
| Quartz - 14808-60-7 | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Chemical Name  | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| Solvent naphtha, petroleum, medium aliphatic<br>64742-88-7 | X          | -             | -            |
| Asphalt<br>8052-42-4                                       | X          | X             | X            |
| Aluminum<br>7429-90-5                                      | X          | X             | X            |
| Perlite<br>93763-70-3                                      | X          | X             | X            |
| Benzene, 1,2,4-trimethyl-<br>95-63-6                       | X          | X             | X            |
| Cumene<br>98-82-8  | X          | X             | X            |
| Diethylbenzenes<br>25340-17-4                              | X          | -             | -            |
| Quartz<br>14808-60-7                                       | X          | X             | X            |
| Water<br>7732-18-5   | -          | -             | X            |
| 1,3,5-Trimethylbenzene<br>108-67-8                         | -          | X             | -            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                  |                |                    |                                    |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b> | Health hazards 2 | Flammability 2 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b> | Health hazards 2 | Flammability 2 | Physical hazards 0 | Personal protection X              |

Issue Date 29-Nov-2015

Revision Date 29-Nov-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Issue Date 25-Jan-2016

Revision Date 28-Sep-2020

Version 4

## 1. IDENTIFICATION

### Product identifier

**Product Name** WET PATCH ROOF CEMENT

### Other means of identification

**Product Code** HE208

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coatings Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Supplier Address**

HENRY COMPANY  
15 Wallsend Dr.  
Scarborough, ON M1E 3X6  
Canada  
Web Site: [www.henry.com](http://www.henry.com)  
[www.ca.henry.com](http://www.ca.henry.com)

#### **Manufacturer Address**

HENRY COMPANY  
999 N. Pacific Coast Hwy., Suite 800  
El Segundo, CA 90245-2716  
Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

#### **Company Phone Number**

#### **Emergency Telephone**

800-486-1278

US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832)

Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

and Canadian Workplace Hazardous Material Information System (WHMIS)

|  |             |
|--|-------------|
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |
| Flammable liquids                                | Category 3  |

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor

**Appearance** viscous**Physical state** liquid**Odor** Solvent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
If skin irritation occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable

**Mixture**

| Chemical Name | CAS No    | Weight-% |
|---------------|-----------|----------|
| Asphalt *     | 8052-42-4 | 15 - 40  |

|  |            |         |
|--|------------|---------|
| Limestone *                                    | 1317-65-3  | 10 - 30 |
| Solvent naphtha, petroleum, medium aliphatic * | 64742-88-7 | 10 - 30 |
| Fullers earth *                                | 8031-18-3  | 7 - 13  |
| Cellulose *                                    | 9004-34-6  | 3 - 7   |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).  |
| <b>Eye contact</b>                        | Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.      |
| <b>Skin contact</b>                       | Wash off immediately with plenty of water.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician. |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.  |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition.  |

##### Most important symptoms and effects, both acute and delayed

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness. |
|-----------------|---|

##### Indication of any immediate medical attention and special treatment needed

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Flammable.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

|                             |   |
|-----------------------------|---|
| <b>Personal precautions</b> | Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. |
|-----------------------------|---|

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Chemical Name  | ACGIH TLV   | OSHA PEL   | NIOSH IDLH   |
|--|---|--|--|
| Asphalt<br>8052-42-4                                       | TWA: 0.5 mg/m <sup>3</sup> benzene-soluble aerosol fume, inhalable particulate matter | -  | Ceiling: 5 mg/m <sup>3</sup> fume 15 min   |
| Limestone<br>1317-65-3                                     | -   | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust                             |
| Solvent naphtha, petroleum, medium aliphatic<br>64742-88-7 | -   | TWA: 500 ppm<br>TWA: 2900 mg/m <sup>3</sup>  | -  |
| Cellulose<br>9004-34-6                                     | TWA: 10 mg/m <sup>3</sup>   | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust<br>TWA: 1 mg/m <sup>3</sup> |

NIOSH IDLH Immediately Dangerous to Life or Health

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                                       |                          |                                |                          |
|---------------------------------------|--------------------------|--------------------------------|--------------------------|
| <b>Physical state</b>                 | liquid                   | <b>Odor</b>                    | Solvent                  |
| <b>Appearance</b>                     | viscous                  | <b>Odor threshold</b>          | No information available |
| <b>Color</b>                          | black                    |                                |                          |
| <b><u>Property</u></b>                | <b><u>Values</u></b>     | <b><u>Remarks • Method</u></b> |                          |
| <b>pH</b>                             | No information available |                                |                          |
| <b>Melting point / freezing point</b> | No information available |                                |                          |
| <b>Boiling point / boiling range</b>  | > 150 °C / 302 °F        |                                |                          |
| <b>Flash point</b>                    | 42 °C / 108 °F           |                                |                          |
| <b>Evaporation rate</b>               | No information available |                                |                          |
| <b>Flammability (solid, gas)</b>      | No information available |                                |                          |
| <b>Flammability Limit in Air</b>      |                          |                                |                          |
| <b>Upper flammability limit:</b>      | 6                        |                                |                          |
| <b>Lower flammability limit:</b>      | 1                        |                                |                          |
| <b>Vapor pressure</b>                 | No information available |                                |                          |
| <b>Vapor density</b>                  | 3.6                      |                                |                          |
| <b>Relative density</b>               | 1 - 1.1                  |                                |                          |
| <b>Water solubility</b>               | Insoluble in water       |                                |                          |
| <b>Solubility in other solvents</b>   | No information available |                                |                          |
| <b>Partition coefficient</b>          | No information available |                                |                          |
| <b>Autoignition temperature</b>       | >250 °C / 482 °F         |                                |                          |
| <b>Decomposition temperature</b>      | No information available |                                |                          |
| <b>Kinematic viscosity</b>            | > 100 mm <sup>2</sup> /s | @ 40 °C                        |                          |
| <b>Dynamic viscosity</b>              | No information available |                                |                          |
| <b>Explosive properties</b>           | Not an explosive         |                                |                          |
| <b>Oxidizing properties</b>           | Not applicable           |                                |                          |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | May cause irritation of respiratory tract. May cause drowsiness or dizziness. |
| <b>Eye contact</b>  | Irritating to eyes.   |
| <b>Skin contact</b> | Irritating to skin.   |
| <b>Ingestion</b>    | Based on available data, the classification criteria are not met.             |

| Chemical Name   | Oral LD50            | Dermal LD50                                 | Inhalation LC50                        |
|---|----------------------|---|--|
| Asphalt<br>8052-42-4  | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit )                     | > 94.4 mg/m <sup>3</sup> ( Rat ) 4.5 h |
| Solvent naphtha, petroleum,<br>medium aliphatic<br>64742-88-7 | > 25 mL/kg ( Rat )   | > 3000 mg/kg ( Rabbit )                     | > 13 mg/L ( Rat ) 4 h                  |
| Cellulose<br>9004-34-6  | > 5 g/kg ( Rat )     | > 2 g/kg ( Rabbit ) > 2000 mg/kg ( Rabbit ) | > 5800 mg/m <sup>3</sup> ( Rat ) 4 h   |

### Information on toxicological effects

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Vapors may cause drowsiness and dizziness. |
|-----------------|---|

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                               |  |
|-------------------------------|--|
| <b>Sensitization</b>          | Based on available data, the classification criteria are not met.                        |
| <b>Germ cell mutagenicity</b> | Based on available data, the classification criteria are not met.                        |
| <b>Carcinogenicity</b>        | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Chemical Name        | ACGIH | IARC     | NTP | OSHA |
|----------------------|-------|----------|-----|------|
| Asphalt<br>8052-42-4 | -     | Group 2B | -   | X    |

*IARC (International Agency for Research on Cancer)*

*Group 2B - Possibly Carcinogenic to Humans*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

|                                 |  |
|---------------------------------|--|
| <b>Reproductive toxicity</b>    | Based on available data, the classification criteria are not met.      |
| <b>STOT - single exposure</b>   | Target Organs. Respiratory system. Eyes. Skin. Central nervous system. |
| <b>STOT - repeated exposure</b> | Based on available data, the classification criteria are not met.      |
| <b>Chronic toxicity</b>         | May cause adverse effects on the bone marrow and blood-forming system. |
| <b>Aspiration hazard</b>        | Based on available data, the classification criteria are not met.      |

### Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 5,252.00 mg/kg |
| <b>ATEmix (dermal)</b>               | 2,573.00 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 67.40 mg/l     |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

### Persistence and degradability

No information available.

### Bioaccumulation

| Chemical Name        | Partition coefficient |
|----------------------|-----------------------|
| Asphalt<br>8052-42-4 | >6                    |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**US EPA Waste Number**

D001

**14. TRANSPORT INFORMATION****DOT**

Not regulated (If shipped in NON BULK packaging by ground transport)

**TDG**

Not regulated (If shipped in NON BULK packaging by ground transport)

**IATA**

|                      |                              |
|----------------------|------------------------------|
| UN/ID no             | UN1999                       |
| Proper shipping name | Tars, liquid                 |
| Hazard Class         | 3                            |
| Packing Group        | III                          |
| ERG Code             | 3L                           |
| Special Provisions   | A3                           |
| Description          | UN1999, Tars, liquid, 3, III |

**IMDG**

Non-regulated per 2.3.2.5

|                      |   |
|----------------------|---|
| UN/ID no             | UN1999                                    |
| Proper shipping name | Tars, liquid                              |
| Hazard Class         | 3   |
| Packing Group        | III                                       |
| EmS-No               | F-E, S-E                                  |
| Special Provisions   | 955                                       |
| Description          | UN1999, Tars, liquid, 3, III, (42°C c.c.) |

**15. REGULATORY INFORMATION****International Inventories**

|               |          |
|---------------|----------|
| TSCA          | Complies |
| DSL/NDL       | Complies |
| EINECS/ELINCS | Complies |
| IECSC         | Complies |
| KECL          | Complies |
| PICCS         | Complies |
| AICS          | Complies |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name       | SARA 313 - Threshold Values % |
|---------------------|-------------------------------|
| Asphalt - 8052-42-4 | 0.1                           |

#### **SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

#### **California Proposition 65**

This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product

| Chemical Name       | California Proposition 65 |
|---------------------|---------------------------|
| Quartz - 14808-60-7 | Carcinogen                |

#### **U.S. State Right-to-Know Regulations**

| Chemical Name                                 | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Asphalt<br>8052-42-4                          | X          | X             | X            |
| Limestone<br>1317-65-3                        | X          | X             | X            |
| Cellulose<br>9004-34-6                        | X          | X             | X            |
| Water<br>7732-18-5                            | -          | -             | X            |
| Quartz<br>14808-60-7                          | X          | X             | X            |
| Ethanol, 2-[(2-aminoethyl)amino]-<br>111-41-1 | X          | X             | X            |

#### **U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

### **16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|                    |                  |                |                    |                                    |
|--------------------|------------------|----------------|--------------------|------------------------------------|
| <b><u>NFPA</u></b> | Health hazards 2 | Flammability 2 | Instability 0      | Physical and Chemical Properties - |
| <b><u>HMIS</u></b> | Health hazards 2 | Flammability 2 | Physical hazards 0 | Personal protection X              |

**Issue Date** 25-Jan-2016**Revision Date** 28-Sep-2020**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

B54W101

## Section 1. Identification

**Product identifier** : Industrial Enamel - Pure White  
**Product code** : B54W101  
**Other means of identification** : Not available.  
**Product type** : Liquid.

### Recommended use of the chemical and restrictions on use

Not applicable.

**Supplier's details** : The Sherwin-Williams Company  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number** : +1 703-741-5970 (Jamaica, El Salvador, Guyana, Belize)  
+(1) 868-224-5716 (Trinidad-Tobago)  
**e-mail address of person responsible for this SDS** : sds@sherwin.com

## Section 2. Hazard identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 3  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 1B  
TOXIC TO REPRODUCTION - Category 2  
ASPIRATION HAZARD - Category 1  
AQUATIC HAZARD (LONG-TERM) - Category 2

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Flammable liquid and vapor.  
May be fatal if swallowed and enters airways.  
May cause an allergic skin reaction.  
May cause cancer.  
Suspected of damaging fertility or the unborn child.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapor. Contaminated work clothing should not be allowed out of the workplace.

**Response** : Collect spillage. IF exposed or concerned: Get medical advice or attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

**Storage** : Store locked up.

**Date of issue/Date of revision** : 6/11/2022 **Date of previous issue** : 2/8/2022

**Version** : 3  
SHW-A4-UN-GHS - GY 1/12

## Section 2. Hazard identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not result in classification** : Please refer to the SDS for additional information. Risk of spontaneous combustion. Spraydust, cloth and other contaminated organic material should be wetted and placed in a sealed metal container. Store in a fire-proof place.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

| Ingredient name             | %         | CAS number |
|-----------------------------|-----------|------------|
| Light Aliphatic Hydrocarbon | ≥25 - ≤50 | 64742-47-8 |
| Methyl Ethyl Ketoxime       | <1        | 96-29-7    |
| Zirconium 2-Ethylhexanoate  | ≤1        | 22464-99-9 |
| Methyl Isobutyl Ketone      | ≤0.3      | 108-10-1   |
| Ethylbenzene                | ≤0.3      | 100-41-4   |
| Calcium 2-Ethylhexanoate    | ≤0.3      | 136-51-6   |
| 2-(2-Methoxyethoxy)-ethanol | ≤0.3      | 111-77-3   |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

## Section 4. First aid measures

- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : May be fatal if swallowed and enters airways.

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

## Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 7. Handling and storage

### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name             | Exposure limits  |
|-----------------------------|--|
| Light Aliphatic Hydrocarbon | <b>ACGIH TLV (United States, 1/2021).<br/>Absorbed through skin.</b><br>TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.   |
| Zirconium 2-Ethylhexanoate  | <b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.<br>STEL: 10 mg/m <sup>3</sup> , (as Zr) 15 minutes. |
| Methyl Isobutyl Ketone      | <b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 20 ppm 8 hours.<br>STEL: 75 ppm 15 minutes.  |
| Ethylbenzene                | <b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 20 ppm 8 hours.  |

### Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

## Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : 148°C (298.4°F)
- Flash point** : Closed cup: 38°C (100.4°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 0.13 (butyl acetate = 1)
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Lower: 1%  
Upper: 6%
- Vapor pressure** : 0.17 kPa (1.27 mm Hg)
- Relative vapor density** : 5 [Air = 1]
- Relative density** : 1.05
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <20.5 mm<sup>2</sup>/s (<20.5 cSt)
- Flow time (ISO 2431)** : Not available.
- Heat of combustion** : 17.879 kJ/g

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials:  
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name    | Result      | Species | Dose        | Exposure |
|----------------------------|-------------|---------|-------------|----------|
| Methyl Ethyl Ketoxime      | LD50 Oral   | Rat     | 930 mg/kg   | -        |
| Zirconium 2-Ethylhexanoate | LD50 Dermal | Rabbit  | >5 g/kg     | -        |
|                            | LD50 Oral   | Rat     | >5 g/kg     | -        |
| Methyl Isobutyl Ketone     | LD50 Oral   | Rat     | 2080 mg/kg  | -        |
| Ethylbenzene               | LD50 Dermal | Rabbit  | >5000 mg/kg | -        |
|                            | LD50 Oral   | Rat     | 3500 mg/kg  | -        |

#### Irritation/Corrosion

| Product/ingredient name     | Result                   | Species | Score | Exposure        | Observation |
|-----------------------------|--------------------------|---------|-------|-----------------|-------------|
| Methyl Ethyl Ketoxime       | Eyes - Severe irritant   | Rabbit  | -     | 100 uL          | -           |
| Methyl Isobutyl Ketone      | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 uL | -           |
|                             | Eyes - Severe irritant   | Rabbit  | -     | 40 mg           | -           |
|                             | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 mg | -           |
| Ethylbenzene                | Eyes - Severe irritant   | Rabbit  | -     | 500 mg          | -           |
|                             | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15 mg  | -           |
| 2-(2-Methoxyethoxy)-ethanol | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 mg | -           |
|                             | Eyes - Moderate irritant | Rabbit  | -     | 500 mg          | -           |

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

## Section 11. Toxicological information

Not available.

### Specific target organ toxicity (single exposure)

| Name                   | Category                 | Route of exposure | Target organs                        |
|------------------------|--------------------------|-------------------|--------------------------------------|
| Methyl Ethyl Ketoxime  | Category 1               | -                 | upper respiratory tract              |
| Methyl Isobutyl Ketone | Category 3<br>Category 3 | -                 | Narcotic effects<br>Narcotic effects |

### Specific target organ toxicity (repeated exposure)

| Name                  | Category   | Route of exposure | Target organs |
|-----------------------|------------|-------------------|---------------|
| Methyl Ethyl Ketoxime | Category 2 | -                 | blood system  |
| Ethylbenzene          | Category 2 | -                 | -             |

### Aspiration hazard

| Name                        | Result                         |
|-----------------------------|--------------------------------|
| Light Aliphatic Hydrocarbon | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene                | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : May cause an allergic skin reaction.  
**Ingestion** : May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : Adverse symptoms may include the following:  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations  
**Ingestion** : Adverse symptoms may include the following:  
 nausea or vomiting  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

## Section 11. Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : Suspected of damaging fertility or the unborn child.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Methyl Ethyl Ketoxime   | 100          | 1100           | N/A                      | N/A                        | N/A                                 |
| Methyl Isobutyl Ketone  | 2080         | N/A            | N/A                      | 11                         | N/A                                 |
| Ethylbenzene            | 3500         | N/A            | N/A                      | 11                         | N/A                                 |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name     | Result                              | Species                             | Exposure |
|-----------------------------|-------------------------------------|-------------------------------------|----------|
| Light Aliphatic Hydrocarbon | Acute LC50 2200 µg/l Fresh water    | Fish - Lepomis macrochirus          | 4 days   |
| Methyl Ethyl Ketoxime       | Acute LC50 843000 µg/l Fresh water  | Fish - Pimephales promelas          | 96 hours |
| Methyl Isobutyl Ketone      | Acute LC50 505000 µg/l Fresh water  | Fish - Pimephales promelas          | 96 hours |
|                             | Chronic NOEC 78 mg/l Fresh water    | Daphnia - Daphnia magna             | 21 days  |
|                             | Chronic NOEC 168 mg/l Fresh water   | Fish - Pimephales promelas - Embryo | 33 days  |
| Ethylbenzene                | Acute EC50 4900 µg/l Marine water   | Algae - Skeletonema costatum        | 72 hours |
|                             | Acute EC50 7700 µg/l Marine water   | Algae - Skeletonema costatum        | 96 hours |
|                             | Acute EC50 6.53 mg/l Marine water   | Crustaceans - Artemia sp. - Nauplii | 48 hours |
|                             | Acute EC50 2.93 mg/l Fresh water    | Daphnia - Daphnia magna - Neonate   | 48 hours |
| 2-(2-Methoxyethoxy)-ethanol | Acute LC50 4200 µg/l Fresh water    | Fish - Oncorhynchus mykiss          | 96 hours |
|                             | Acute EC50 >930 ppm Fresh water     | Daphnia - Daphnia magna             | 48 hours |
|                             | Acute LC50 7500000 µg/l Fresh water | Fish - Lepomis macrochirus          | 96 hours |

### Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Methyl Isobutyl Ketone  | -                 | -          | Readily          |
| Ethylbenzene            | -                 | -          | Readily          |

### Bioaccumulative potential

## Section 12. Ecological information

| Product/ingredient name    | LogP <sub>ow</sub> | BCF        | Potential |
|----------------------------|--------------------|------------|-----------|
| Methyl Ethyl Ketoxime      | -                  | 2.5 to 5.8 | low       |
| Zirconium 2-Ethylhexanoate | -                  | 2.96       | low       |
| Calcium 2-Ethylhexanoate   | -                  | 2.96       | low       |

### Mobility in soil





Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | UN   | IMDG   | IATA   |
|----------------------------|--|--|--|
| UN number                  | UN1263   | UN1263   | UN1263   |
| UN proper shipping name    | PAINT  | PAINT. Marine pollutant (Light Aliphatic Hydrocarbon)  | PAINT  |
| Transport hazard class(es) | 3<br> | 3<br>  | 3<br> |
| Packing group              | III  | III  | III  |
| Environmental hazards      | Yes. The environmentally hazardous substance mark is not required.                       | Yes.   | Yes. The environmentally hazardous substance mark is not required.                         |

### Additional information

**IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules** F-E, S-E

**IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 14. Transport information

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

|                          |  |
|--------------------------|--|
| <b>Australia</b>         | : Not determined.  |
| <b>Canada</b>            | : Not determined.  |
| <b>China</b>             | : Not determined.  |
| <b>Europe</b>            | : Not determined.  |
| <b>Japan</b>             | : <b>Japan inventory (CSCL)</b> : Not determined.<br><b>Japan inventory (ISHL)</b> : Not determined. |
| <b>New Zealand</b>       | : Not determined.  |
| <b>Philippines</b>       | : Not determined.  |
| <b>Republic of Korea</b> | : Not determined.  |
| <b>Taiwan</b>            | : Not determined.  |
| <b>Thailand</b>          | : Not determined.  |
| <b>Turkey</b>            | : Not determined.  |
| <b>United States</b>     | : Not determined.  |
| <b>Viet Nam</b>          | : Not determined.  |

## Section 16. Other information

### History

**Date of printing** : 6/11/2022

**Date of issue/Date of revision** : 6/11/2022

**Date of previous issue** : 2/8/2022

**Version** : 3

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 N/A = Not available  
 SGG = Segregation Group  
 UN = United Nations

## Section 16. Other information

### Procedure used to derive the classification

| Classification  | Justification   |
|---|---|
| FLAMMABLE LIQUIDS - Category 3<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 1B<br>TOXIC TO REPRODUCTION - Category 2<br>ASPIRATION HAZARD - Category 1<br>AQUATIC HAZARD (LONG-TERM) - Category 2 | On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : KEM KROMIK® Universal Metal Primer (VOC Comp.) - Brown

**Product code** : B50NZ6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Material uses** : Paint or paint related material.

: Industrial use only.

### 1.3 Details of the supplier of the safety data sheet

Mfg. in U.S.A and exported by:  
The Sherwin-Williams Company  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

EU Only Representative: Valspar B.V.  
Zuiveringweg 89  
8243 PE Lelystad  
P.O. Box 2139  
The Netherlands  
Phone: +31 (0)320 29 22 00

**e-mail address of person responsible for this SDS** : sds@sherwin.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : +431 406 43 43

#### Supplier

**Telephone number** : +1 703-741-5970

**Hours of operation** : Emergency contact available 24 hours a day

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Skin Irrit. 2, H315

Eye Dam. 1, H318

Carc. 1B, H350

Repr. 2, H361d

Asp. Tox. 1, H304

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

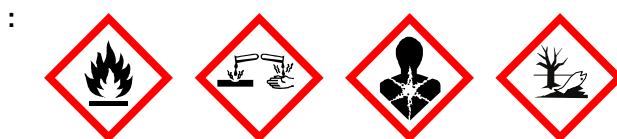
See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## SECTION 2: Hazards identification

### 2.2 Label elements

#### Hazard pictograms



#### Signal word

: Danger

#### Hazard statements

: Flammable liquid and vapor.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye damage.  
May cause cancer.  
Suspected of damaging the unborn child.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

#### Prevention

: Obtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

#### Response

: Collect spillage. IF exposed or concerned: Get medical advice or attention.

#### Storage

: Not applicable.

#### Disposal

: Not applicable.

#### Hazardous ingredients

: Xylene, mixed isomers  
Toluene  
Cyclohexanone  
Methyl Ethyl Ketoxime

#### Supplemental label elements

: Contains butanone oxime. May produce an allergic reaction.  
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. FOR INDUSTRIAL USE ONLY

### Special packaging requirements

Not applicable.

### 2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### Other hazards which do not result in classification

: Risk of spontaneous combustion. Spraydust, cloth and other contaminated organic material should be wetted and placed in a sealed metal container. Store in a fire-proof place.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixture

:

| Product/ingredient name | Identifiers  | %   | Regulation (EC) No. 1272/2008 [CLP]  | Type    |
|-------------------------|--|-----|--|---------|
| Xylene, mixed isomers   | REACH #:<br>01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | <10 | Flam. Liq. 3, H226<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Flam. Liq. 2, H225 | [1] [2] |
| Toluene                 | REACH #:   | ≤5  | Flam. Liq. 2, H225   | [1] [2] |

### SECTION 3: Composition/information on ingredients

|   |   |      |   |         |
|---|---|------|---|---------|
|   | 01-2119471310-51<br>EC: 203-625-9<br>CAS: 108-88-3<br>Index: 601-021-00-3             |      | Skin Irrit. 2, H315<br>Repr. 2, H361d<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412   |         |
| Solvent naphtha<br>(petroleum), light arom. | REACH #:<br>01-2119455851-35<br>CAS: 128601-23-0<br>Index: 649-356-00-4               | ≤5   | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>EUH066  | [1]     |
| Cyclohexanone                               | REACH #:<br>01-2119453616-35<br>EC: 203-631-1<br>CAS: 108-94-1<br>Index: 606-010-00-7 | ≤5   | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318   | [1] [2] |
| Zinc Phosphate                              | EC: 231-944-3<br>CAS: 7779-90-0<br>Index: 030-011-00-6                                | ≤3   | Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 1, H410 (M=1)  | [1]     |
| Ethylbenzene                                | REACH #:<br>01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4 | ≤3   | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing organs)<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412  | [1] [2] |
| Methyl Ethyl Ketoxime                       | REACH #:<br>01-2119539477-28<br>EC: 202-496-6<br>CAS: 96-29-7<br>Index: 616-014-00-0  | ≤0.3 | Acute Tox. 3, H301<br>Acute Tox. 4, H312<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Carc. 1B, H350<br>STOT SE 1, H370 (upper respiratory tract)<br>STOT SE 3, H336<br>STOT RE 2, H373 (blood system) | [1] [2] |
| Light Aliphatic<br>Hydrocarbon              | CAS: 64742-47-8<br>Index: 649-422-00-2  | ≤0.3 | Flam. Liq. 3, H226<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411<br>EUH066<br><br><b>See Section 16 for the full text of the H statements declared above.</b>   | [1]     |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### **4.2 Most important symptoms and effects, both acute and delayed**

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains butanone oxime. May produce an allergic reaction.

### **4.3 Indication of any immediate medical attention and special treatment needed**

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, carbon dioxide, powders.
- Unsuitable extinguishing media** : Do not use water jet.

### **5.2 Special hazards arising from the substance or mixture**

## SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.
- Keep unnecessary and unprotected personnel from entering.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### 6.3 Methods and materials for containment and cleaning up

- : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- : Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits.  
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.  
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.  
Operators should wear antistatic footwear and clothing and floors should be of the conducting type.  
Keep away from heat, sparks and flame. No sparking tools should be used.  
Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Put on appropriate personal protective equipment (see Section 8).  
Never use pressure to empty. Container is not a pressure vessel.  
Always keep in containers made from the same material as the original one.  
Comply with the health and safety at work laws.  
Do not allow to enter drains or watercourses.

## SECTION 7: Handling and storage

### Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

### 7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Contaminated absorbent material may pose the same hazard as the spilled product.

### 7.3 Specific end use(s)

#### Recommendations

: Not available.

#### Industrial sector specific solutions

: Not available.

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

**Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.**

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name | Exposure limit values   |
|-------------------------|---|
| Xylene, mixed isomers   | <b>Regulation on Limit Values - MAC (Austria, 4/2021).</b><br>PEAK: 442 mg/m <sup>3</sup> , 4 times per shift, 15 minutes.<br>TWA: 50 ppm 8 hours.<br>PEAK: 100 ppm, 4 times per shift, 15 minutes.<br>TWA: 221 mg/m <sup>3</sup> 8 hours.                        |
| Toluene                 | <b>Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin.</b><br>TWA: 50 ppm 8 hours.<br>TWA: 190 mg/m <sup>3</sup> 8 hours.<br>PEAK: 100 ppm, 4 times per shift, 15 minutes.<br>PEAK: 380 mg/m <sup>3</sup> , 4 times per shift, 15 minutes. |
| Cyclohexanone           | <b>Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin.</b><br>TWA: 5 ppm 8 hours.<br>PEAK: 80 mg/m <sup>3</sup> , 4 times per shift, 15 minutes.<br>TWA: 20 mg/m <sup>3</sup> 8 hours.<br>PEAK: 20 ppm, 4 times per shift, 15 minutes.     |

## SECTION 8: Exposure controls/personal protection

|                       |  |
|-----------------------|--|
| Ethylbenzene          | <b>Regulation on Limit Values - MAC (Austria, 4/2021). Absorbed through skin.</b><br>TWA: 100 ppm 8 hours.<br>TWA: 440 mg/m <sup>3</sup> 8 hours.<br>CEIL: 200 ppm, 8 times per shift, 5 minutes.<br>CEIL: 880 mg/m <sup>3</sup> , 8 times per shift, 5 minutes. |
| Methyl Ethyl Ketoxime | <b>Regulation on Limit Values - MAC (Austria, 4/2021). Skin sensitizer.</b>  |

### Recommended monitoring procedures

- : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- : Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

### DNELs/DMELs

| Product/ingredient name | Type | Exposure              | Value                  | Population                                     | Effects  |
|-------------------------|------|-----------------------|------------------------|--|----------|
| Xylene, mixed isomers   | DNEL | Long term Dermal      | 180 mg/kg bw/day       | Workers  | Systemic |
|                         | DNEL | Long term Dermal      | 108 mg/kg bw/day       | General population [Human via the environment] | Systemic |
|                         | DNEL | Long term Inhalation  | 77 mg/m <sup>3</sup>   | Workers  | Systemic |
|                         | DNEL | Short term Inhalation | 289 mg/m <sup>3</sup>  | Workers  | Systemic |
|                         | DNEL | Short term Inhalation | 289 mg/m <sup>3</sup>  | Workers  | Local    |
|                         | DNEL | Long term Inhalation  | 14.8 mg/m <sup>3</sup> | General population [Human via the environment] | Systemic |
|                         | DNEL | Short term Inhalation | 174 mg/m <sup>3</sup>  | General population [Consumers]                 | Systemic |
|                         | DNEL | Short term Inhalation | 174 mg/m <sup>3</sup>  | General population [Consumers]                 | Local    |
| Toluene                 | DNEL | Short term Inhalation | 226 mg/m <sup>3</sup>  | General population [Human via the environment] | Systemic |
|                         | DNEL | Short term Inhalation | 226 mg/m <sup>3</sup>  | General population [Human via the environment] | Local    |
|                         | DNEL | Long term Dermal      | 226 mg/m <sup>3</sup>  | General population [Human via the environment] | Systemic |

|  |                |                       |                                |  |          |
|--|----------------|-----------------------|--------------------------------|--|----------|
| Solvent naphtha (petroleum), light arom. | DNEL           | Long term Inhalation  | 226 mg/kg bw/day               | General population [Human via the environment] | Systemic |
|  | DNEL           | Long term Inhalation  | 56.5 mg/m <sup>3</sup>         | General population [Human via the environment] | Systemic |
|  | DNEL           | Long term Oral        | 8.13 mg/kg bw/day              | General population [Human via the environment] | Systemic |
|  | DNEL           | Long term Inhalation  | 192 mg/m <sup>3</sup>          | Workers  | Systemic |
|  | DNEL           | Long term Inhalation  | 192 mg/m <sup>3</sup>          | Workers  | Local    |
|  | DNEL           | Short term Inhalation | 384 mg/m <sup>3</sup>          | Workers  | Systemic |
|  | DNEL           | Short term Inhalation | 384 mg/m <sup>3</sup>          | Workers  | Local    |
|  | DNEL           | Long term Dermal      | 384 mg/kg bw/day               | Workers  | Systemic |
|  | DNEL           | Long term Inhalation  | 56.5 mg/m <sup>3</sup>         | General population [Consumers]                 | Local    |
|  | DNEL           | Long term Dermal      | 25 mg/kg bw/day                | Workers  | Systemic |
|  | DNEL           | Long term Inhalation  | 150 mg/m <sup>3</sup>          | Workers  | Systemic |
|  | DNEL           | Long term Dermal      | 11 mg/kg bw/day                | General population [Consumers]                 | Systemic |
|  | DNEL           | Long term Inhalation  | 32 mg/m <sup>3</sup>           | General population [Consumers]                 | Systemic |
| DNEL                                     | Long term Oral | 11 mg/kg bw/day       | General population [Consumers] | Systemic                                       |          |

| Product/ingredient name | Compartment Detail     | Value           | Method Detail      |
|-------------------------|------------------------|-----------------|--------------------|
| Xylene, mixed isomers   | Fresh water            | 0.327 mg/l      | -                  |
|                         | Marine water           | 0.327 mg/l      | -                  |
|                         | Fresh water sediment   | 12.46 mg/l      | -                  |
|                         | Sewage Treatment Plant | 6.58 mg/l       | -                  |
|                         | Soil                   | 2.31 mg/kg      | -                  |
|                         | Marine water sediment  | 12.46 mg/l      | -                  |
| Toluene                 | Fresh water sediment   | 0.68 mg/l       | Assessment Factors |
|                         | Marine water sediment  | 0.68 mg/l       | Assessment Factors |
|                         | Sewage Treatment Plant | 13.61 mg/l      | Assessment Factors |
|                         | Soil                   | 2.89 mg/kg      | Assessment Factors |
|                         | Fresh water sediment   | 16.39 mg/kg dwt | -                  |
|                         | Marine water sediment  | 16.39 mg/kg dwt | -                  |

## SHW-A4-EU-CLP44-AT

## **SECTION 8: Exposure controls/personal protection**

- Appropriate engineering controls** :
- Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.
  - Users are advised to consider national Occupational Exposure Limits or other equivalent values.

### **Individual protection measures**

- Hygiene measures** :
- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** :
- Use safety eyewear designed to protect against splash of liquids.

### **Skin protection**

#### **Hand protection**

#### **Gloves**

- Wear suitable gloves tested to EN374.
- Gloves for short term exposure/splash protection (less than 10 min.): Nitrile>0.12 mm  
Gloves for splash protection need to be changed immediately when in contact with chemicals.  
Gloves for repeated or prolonged exposure (breakthrough time > 240 min.)  
When the hazardous ingredients in Section 3 contain any of the following: Aromatic solvents (Xylene, Toluene) or Aliphatic solvents or Mineral Oil use: Polyvinyl alcohol (PVA) gloves 0.2-0.3 mm  
Otherwise use: Butyl gloves >0.3 mm  
For long term exposure or spills (breakthrough time >480 min.): Use PE laminated gloves as under gloves  
Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.  
The recommendation for the type or types of glove to use when handling this product is based on information from the following source: Solvent resin manufacturers and European Solvents Industry Group (ESIG)  
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.  
The breakthrough time must be greater than the end use time of the product.  
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.  
Gloves should be replaced regularly and if there is any sign of damage to the glove material.  
Always ensure that gloves are free from defects and that they are stored and used correctly.  
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.  
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.  
The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

#### **Body protection**

**SECTION 8: Exposure controls/personal protection**

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Application methods:  
Brush or roller. Approved/certified respirator with organic vapor cartridge. Filter type: A2 P2 (EN14387).  
Manual spraying. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.
- Environmental exposure controls** : Do not allow to enter drains or watercourses.

**Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.**

**SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Solvent.
- Odor threshold** : Not Available (Not Tested).
- pH** : Not applicable.
- Melting point/freezing point** : Not relevant/applicable due to nature of the product.
- Initial boiling point and boiling range** : 105°C
- Flash point** : Closed cup: 27°C [Pensky-Martens Closed Cup]
- Evaporation rate** : 2 (butyl acetate = 1)
- Flammability (solid, gas)** : Not relevant/applicable due to nature of the product.
- Upper/lower flammability or explosive limits** : LEL: 0.7% (Light Aromatic Hydrocarbons)  
UEL: 8.1% (Cyclohexanone)
- Vapor pressure** : 2.9 kPa (22 mm Hg)
- Vapor density** : 3.1 [Air = 1]
- Relative density** : 1.52
- Solubility(ies)** : Not relevant/applicable due to nature of the product.
- Partition coefficient: n-octanol/water** : Not relevant/applicable due to nature of the product.
- Auto-ignition temperature** : Not relevant/applicable due to nature of the product.
- Decomposition temperature** : Not relevant/applicable due to nature of the product.
- Viscosity** : Kinematic (40°C): <20.5 mm<sup>2</sup>/s
- Explosive properties** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Oxidizing properties** : Under normal conditions of storage and use, hazardous reactions will not occur.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.

**10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

**10.6 Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains butanone oxime. May produce an allergic reaction.

**Acute toxicity**

| Product/ingredient name                  | Result                | Species | Dose                | Exposure |
|--|-----------------------|---------|---------------------|----------|
| Xylene, mixed isomers                    | LC50 Inhalation Gas.  | Rat     | 6700 ppm            | 4 hours  |
|  | LD50 Oral             | Rat     | 4300 mg/kg          | -        |
| Toluene                                  | LC50 Inhalation Vapor | Rat     | 49 g/m <sup>3</sup> | 4 hours  |
|  | LD50 Oral             | Rat     | 636 mg/kg           | -        |
| Solvent naphtha (petroleum), light arom. | LD50 Oral             | Rat     | 8400 mg/kg          | -        |
| Cyclohexanone                            | LC50 Inhalation Gas.  | Rat     | 8000 ppm            | 4 hours  |
|  | LD50 Oral             | Rat     | 1800 mg/kg          | -        |
| Ethylbenzene                             | LD50 Dermal           | Rabbit  | >5000 mg/kg         | -        |
|  | LD50 Oral             | Rat     | 3500 mg/kg          | -        |

## SECTION 11: Toxicological information

|                       |           |     |           |   |
|-----------------------|-----------|-----|-----------|---|
| Methyl Ethyl Ketoxime | LD50 Oral | Rat | 930 mg/kg | - |
|-----------------------|-----------|-----|-----------|---|

### Acute toxicity estimates

| Route               | ATE value      |
|---------------------|----------------|
| Oral                | 23085.37 mg/kg |
| Dermal              | 7882.28 mg/kg  |
| Inhalation (gases)  | 50511.72 ppm   |
| Inhalation (vapors) | 634.73 mg/l    |

### Irritation/Corrosion

| Product/ingredient name                  | Result                   | Species | Score | Exposure                 | Observation |
|--|--------------------------|---------|-------|--------------------------|-------------|
| Xylene, mixed isomers                    | Eyes - Mild irritant     | Rabbit  | -     | 87 mg                    | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 5 mg            | -           |
|  | Skin - Mild irritant     | Rat     | -     | 8 hours 60 uL            | -           |
|  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 mg          | -           |
| Toluene                                  | Skin - Moderate irritant | Rabbit  | -     | 100 %                    | -           |
|  | Eyes - Mild irritant     | Rabbit  | -     | 0.5 minutes              | -           |
|  | Eyes - Mild irritant     | Rabbit  | -     | 100 mg                   | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 870 ug                   | -           |
| Solvent naphtha (petroleum), light arom. | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 2 mg            | -           |
|  | Skin - Mild irritant     | Pig     | -     | 24 hours 250 uL          | -           |
|  | Skin - Mild irritant     | Rabbit  | -     | 435 mg                   | -           |
|  | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 mg           | -           |
| Cyclohexanone                            | Skin - Moderate irritant | Rabbit  | -     | 500 mg                   | -           |
|  | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 100 microliters | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 250 ug          | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 20 mg                    | -           |
| Ethylbenzene                             | Skin - Mild irritant     | Human   | -     | 48 hours 50 %            | -           |
|  | Skin - Mild irritant     | Rabbit  | -     | 500 mg                   | -           |
|  | Eyes - Severe irritant   | Rabbit  | -     | 500 mg                   | -           |
|  | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15 mg           | -           |
| Methyl Ethyl Ketoxime                    | Eyes - Severe irritant   | Rabbit  | -     | 100 uL                   | -           |

**Conclusion/Summary** : Not available.

### Sensitization

No data available

**Conclusion/Summary** : Not available.

### Mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### Teratogenicity

No data available

## SECTION 11: Toxicological information

### Specific target organ toxicity (single exposure)

| Product/ingredient name                  | Category   | Route of exposure | Target organs                |
|--|------------|-------------------|------------------------------|
| Xylene, mixed isomers                    | Category 3 | -                 | Respiratory tract irritation |
| Toluene                                  | Category 3 | -                 | Narcotic effects             |
| Solvent naphtha (petroleum), light arom. | Category 3 | -                 | Respiratory tract irritation |
| Methyl Ethyl Ketoxime                    | Category 3 | -                 | Narcotic effects             |
|  | Category 1 | -                 | upper respiratory tract      |
|  | Category 3 | -                 | Narcotic effects             |

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| Xylene, mixed isomers   | Category 2 | -                 | -              |
| Toluene                 | Category 2 | -                 | -              |
| Ethylbenzene            | Category 2 | -                 | hearing organs |
| Methyl Ethyl Ketoxime   | Category 2 | -                 | blood system   |

### Aspiration hazard

| Product/ingredient name                  | Result                         |
|--|--------------------------------|
| Xylene, mixed isomers                    | ASPIRATION HAZARD - Category 1 |
| Toluene                                  | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), light arom. | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene                             | ASPIRATION HAZARD - Category 1 |
| Light Aliphatic Hydrocarbon              | ASPIRATION HAZARD - Category 1 |

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

| Product/ingredient name | Result                             | Species   | Exposure |
|-------------------------|------------------------------------|---|----------|
| Xylene, mixed isomers   | Acute LC50 8500 µg/l Marine water  | Crustaceans - Palaemonetes pugio                                    | 48 hours |
| Toluene                 | Acute LC50 13400 µg/l Fresh water  | Fish - Pimephales promelas  | 96 hours |
|                         | Acute EC50 >433 ppm Marine water   | Algae - Skeletonema costatum  | 96 hours |
|                         | Acute EC50 11600 µg/l Fresh water  | Crustaceans - Gammarus pseudolimnaeus - Adult                       | 48 hours |
|                         | Acute EC50 6000 µg/l Fresh water   | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
|                         | Acute LC50 5500 µg/l Fresh water   | Fish - Oncorhynchus kisutch - Fry                                   | 96 hours |
| Cyclohexanone           | Chronic NOEC 1000 µg/l Fresh water | Daphnia - Daphnia magna   | 21 days  |
|                         | Acute EC50 32.9 mg/l Fresh water   | Algae - Chlamydomonas reinhardtii - Exponential growth phase        | 72 hours |
|                         | Acute LC50 527000 µg/l Fresh water | Fish - Pimephales promelas  | 96 hours |
|                         | Chronic EC10 3.56 mg/l Fresh water | Algae - Chlamydomonas   | 72 hours |

## SECTION 12: Ecological information

|                             |                                    |  |          |
|-----------------------------|------------------------------------|--|----------|
| Zinc Phosphate              | Acute LC50 90 µg/l Fresh water     | reinhardtii - Exponential growth phase | 96 hours |
| Ethylbenzene                | Acute EC50 4900 µg/l Marine water  | Fish - Oncorhynchus mykiss             | 72 hours |
|                             | Acute EC50 7700 µg/l Marine water  | Algae - Skeletonema costatum           | 96 hours |
|                             | Acute EC50 6.53 mg/l Marine water  | Algae - Skeletonema costatum           | 48 hours |
|                             |                                    | Crustaceans - Artemia sp. - Nauplii    |          |
|                             | Acute EC50 2.93 mg/l Fresh water   | Daphnia - Daphnia magna - Neonate      | 48 hours |
| Methyl Ethyl Ketoxime       | Acute LC50 4200 µg/l Fresh water   | Fish - Oncorhynchus mykiss             | 96 hours |
| Light Aliphatic Hydrocarbon | Acute LC50 843000 µg/l Fresh water | Fish - Pimephales promelas             | 96 hours |
|                             | Acute LC50 2200 µg/l Fresh water   | Fish - Lepomis macrochirus             | 4 days   |

### 12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|-------------------------|------|--------|------|----------|
| No data available       |      |        |      |          |

**Conclusion/Summary** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Xylene, mixed isomers   | -                 | -          | Readily          |
| Toluene                 | -                 | -          | Readily          |
| Ethylbenzene            | -                 | -          | Readily          |

### 12.3 Bioaccumulative potential

| Product/ingredient name                  | LogP <sub>ow</sub> | BCF         | Potential |
|--|--------------------|-------------|-----------|
| Xylene, mixed isomers                    | -                  | 8.1 to 25.9 | low       |
| Toluene                                  | -                  | 90          | low       |
| Solvent naphtha (petroleum), light arom. | -                  | 10 to 2500  | high      |
| Zinc Phosphate                           | -                  | 60960       | high      |
| Methyl Ethyl Ketoxime                    | -                  | 2.5 to 5.8  | low       |

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods






#### Product

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
- Hazardous waste** : Yes.
- European waste catalogue (EWC)** : waste paint and varnish containing organic solvents or other hazardous substances 08 01 11\*
- Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### Packaging

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
- European waste catalogue (EWC)** : packaging containing residues of or contaminated by hazardous substances 15 01 10\*
- Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|  | ADR/RID  | IMDG   | IATA   |
|--|--|--|--|
| <b>14.1 UN number</b>                            | UN1263   | UN1263   | UN1263   |
| <b>14.2 UN proper shipping name</b>              | PAINT  | PAINT. Marine pollutant (Zinc Phosphate, Light Aromatic Hydrocarbons)  | PAINT  |
| <b>14.3 Transport Hazard Class(es)/ Label(s)</b> | 3<br>  | 3<br>  | 3<br> |
| <b>14.4 Packing group</b>                        | III  | III  | III  |
| <b>14.5 Environmental hazards</b>                | Yes.   | Yes.   | Yes. The environmentally hazardous substance mark is not required.                         |
|  |  |  |  |

**SECTION 14: Transport information**

|                               |  |  |  |
|-------------------------------|--|--|--|
| <b>Additional information</b> | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><b>Tunnel code</b> D/E | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><b>Emergency schedules</b> F-E, S-E | The environmentally hazardous substance mark may appear if required by other transportation regulations. |
|-------------------------------|--|--|--|

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not applicable.

*Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.*

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorization****Annex XIV**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.

**Other EU regulations**

**VOC content (2010/75/EU)** : 26.8 w/w  
408 g/l

**Seveso Directive**

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

**National regulations**

**15.2 Chemical Safety Assessment** : No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms**

: ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
vPvB = Very Persistent and Very Bioaccumulative  
N/A = Not available

**Key literature references and sources for data**

: Regulation (EC) No. 1272/2008 [CLP]  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830  
Directive 2012/18/EU, and relative amendments & additions  
Directive 2008/98/EC, and relative amendments & additions  
Directive 2009/161/EU, and relative amendments & additions  
CEPE Guidelines

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification          | Justification         |
|-------------------------|-----------------------|
| Flam. Liq. 3, H226      | On basis of test data |
| Skin Irrit. 2, H315     | Calculation method    |
| Eye Dam. 1, H318        | Calculation method    |
| Carc. 1B, H350          | Calculation method    |
| Repr. 2, H361d          | Calculation method    |
| Asp. Tox. 1, H304       | Calculation method    |
| Aquatic Chronic 2, H411 | Calculation method    |

**Full text of abbreviated H statements**

: H225 Highly flammable liquid and vapor.  
H226 Flammable liquid and vapor.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H350 May cause cancer.  
H361d Suspected of damaging the unborn child.  
H370 Causes damage to organs.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.

**SECTION 16: Other information**

|   |                   |   |
|---|-------------------|---|
| <b>Full text of classifications [CLP/GHS]</b> | Acute Tox. 3      | ACUTE TOXICITY - Category 3                                     |
|   | Acute Tox. 4      | ACUTE TOXICITY - Category 4                                     |
|   | Aquatic Acute 1   | AQUATIC HAZARD (ACUTE) - Category 1                             |
|   | Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1                         |
|   | Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2                         |
|   | Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3                         |
|   | Asp. Tox. 1       | ASPIRATION HAZARD - Category 1                                  |
|   | Carc. 1B          | CARCINOGENICITY - Category 1B                                   |
|   | Eye Dam. 1        | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1                 |
|   | Eye Irrit. 2      | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2                 |
|   | Flam. Liq. 2      | FLAMMABLE LIQUIDS - Category 2                                  |
|   | Flam. Liq. 3      | FLAMMABLE LIQUIDS - Category 3                                  |
|   | Repr. 2           | TOXIC TO REPRODUCTION - Category 2                              |
|   | Skin Irrit. 2     | SKIN CORROSION/IRRITATION - Category 2                          |
|   | Skin Sens. 1      | SKIN SENSITIZATION - Category 1                                 |
|   | STOT RE 2         | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

|           |   |
|-----------|---|
| STOT SE 1 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |

**Date of printing** : 22, Jun, 2022.

**Date of issue/ Date of revision** : 22, Jun, 2022

**Date of previous issue** : 02, May, 2022

: If there is no previous validation date please contact your supplier for more information.

**Version** : 8.01

**Notice to reader**

*It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.*

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Klean Strip Adhesive Remover / Klean Strip Premium Stripper

**Company Name:** W. M. Barr  
2105 Channel Avenue  
Memphis, TN 38113

**Phone Number:** (901)775-0100

**Web site address:** www.wmbarr.com

**Emergency Contact:** 3E 24 Hour Emergency Contact (800)451-8346

**Information:** W.M. Barr Customer Service (800)398-3892

**Intended Use:** Removal of adhesives, mastics, & contact cement from wood, concrete, metal and masonry.

**Synonyms:** GKAS94325, QKAS94326, GKS3, QKS3, QKS3L, QKS34, PA11185

## 2. HAZARDS IDENTIFICATION

**Skin Corrosion/Irritation, Category 1A-1C**

**Serious Eye Damage/Eye Irritation, Category 1**

**Germ Cell Mutagenicity, Category 1A**

**Carcinogenicity, Category 1B**

**Target Organ Systemic Toxicity (single exposure), Category 1**

**Target Organ Systemic Toxicity (single exposure), Category 3**



**GHS Signal Word:** Danger

**GHS Hazard Phrases:**

H314: Causes severe skin burns and eye damage.  
H318: Causes serious eye damage.  
H340: May cause genetic defects.  
H350: May cause cancer.  
H370: Causes damage to organs.  
H335: May cause respiratory irritation.

**GHS Precaution Phrases:**

P260: Do not breathe gas/mist/vapours/spray.  
P264: Wash hands thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P281: Use personal protective equipment as required.  
P270: Do not eat, drink or smoke when using this product.  
P261: Avoid breathing gas/mist/vapours/spray.  
P271: Use only outdoors or in a well-ventilated area.

**GHS Response Phrases:**

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P363: Wash contaminated clothing before reuse.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310: Immediately call a POISON CENTER/doctor.  
P321: Specific treatment see directions on this label.  
P308+313: IF exposed or concerned: Get medical attention/advice.  
P312: Call a POISON CENTER/doctor if you feel unwell.

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

## GHS Storage and Disposal Phrases:

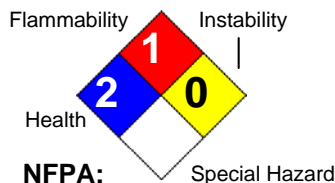
P405: Store locked up.

P501: Dispose of contents/container according to local, state and federal regulations.

P403+233: Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere.

## Hazard Rating System:

|              |   |   |
|--------------|---|---|
| HEALTH       | * | 2 |
| FLAMMABILITY |   | 1 |
| PHYSICAL     |   | 0 |
| PPE          |   | X |



## HMIS:

## OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

## Potential Health Effects (Acute and Chronic):

### INHALATION ACUTE EXPOSURE EFFECTS:

Vapor harmful. May cause upper respiratory tract irritation and central nervous system depression with symptoms such as confusion, lightheadedness, nausea, vomiting, headache, drowsiness, and fatigue. Mist or vapor can irritate the throat and lungs. Causes formation of carbon monoxide in blood which may affect the cardiovascular system and central nervous system. Continued exposure may cause unconsciousness and even death. Intentional misuse of this product by deliberately concentrating and inhaling the vapors can be harmful or fatal. Concurrent exposure to carbon monoxide, smoking, and physical activity may increase the level of carboxyhemoglobin levels in the blood resulting in additive effects.

### SKIN CONTACT ACUTE EXPOSURE EFFECTS:

This product is a skin irritant. Product may be absorbed through the skin. Harmful if absorbed through the skin. Effects may range from mild irritation to severe pain, and possibly burns, depending on the intensity of contact. Prolonged or repeated contact may dry the skin and cause irritation. Symptoms include redness, itching, burning, drying and cracking of the skin, and skin burns.

### EYE CONTACT ACUTE EXPOSURE EFFECTS:

This material is an eye irritant. Vapors may irritate the eyes. Contact may cause tearing, redness, a stinging or burning feeling, swelling, and blurred vision.

### INGESTION ACUTE EXPOSURE EFFECTS:

Poison. May be fatal or cause blindness if swallowed. May cause nausea or vomiting. Aspiration hazard. This material may be aspirated into the lungs during vomiting. If vomiting results in aspiration, chemical pneumonia could occur. It can be readily absorbed by the stomach and intestinal tract. Absorption through the gastrointestinal tract may produce central nervous system depression and systemic effects. Swallowing this material may irritate the mucous membranes of the mouth, throat, and esophagus. May cause cyanosis (blue coloring of the skin and nails from lack of oxygen).

### CHRONIC EXPOSURE EFFECTS:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Prolonged skin contact may cause irritation, redness, swelling and possible tissue destruction. Prolonged or repeated contact may cause dermatitis. Prolonged skin contact may result in absorption of a harmful amount of this material. May cause liver damage. May cause cancer based on animal data (see Section 11. Toxicological Information).

### Target Organs:

Blood, central nervous system, liver, skin, cardiovascular system, eyes, respiratory system, lungs.

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

**Medical Conditions Generally Aggravated By Exposure:** Heart of cardiovascular disorders, kidney disorders, liver disorders, central nervous system disorders, respiratory system (including asthma and other breathing disorders), skin disorders and allergies.

Alcohol may enhance the toxic effects of methylene chloride exposure. May cross the placenta. May be excreted in breast milk.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS #     | Hazardous Components (Chemical Name)   | Concentration |
|-----------|--|---------------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}                               | 75.0 %        |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                                  | 20.0 %        |
| 8052-41-3 | Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits} | 3.0 %         |

## 4. FIRST AID MEASURES

### Emergency and First Aid

#### Procedures:

#### INHALATION:

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

#### SKIN CONTACT:

Wash with soap and large quantities of water and seek medical attention if irritation from contact persists.

#### EYE CONTACT:

Immediately flush with water, remove any contact lens, continue flushing with water for at least 15 minutes, then get medical attention immediately.

#### INGESTION:

Do not induce vomiting, unless directed to by medical personnel. Call your poison control center, hospital, emergency room, or physician immediately for instructions. Do not give anything by mouth to an unconscious person.

### Signs and Symptoms Of Exposure:

See Potential Health Effects.

### Note to Physician:

This product contains methylene chloride and methanol.

This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmia in individuals exposed to this material. This material is metabolized to carbon monoxide. Consequently, elevations in carboxyhemoglobin as high as 50% have been reported, and levels may continue to rise for several hours after exposure has ceased. Data in experimental animals suggest there is a narrow margin between concentrations causing

**Klean Strip Adhesive Remover / Klean Strip  
Premium Stripper**

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

anesthesia and death. Adrenalin should never be given to a person overexposed to methylene chloride.

**5. FIRE FIGHTING MEASURES**

|  |   |
|--|---|
| <b>Flash Pt:</b>                         | NP  |
| <b>Explosive Limits:</b>                 | LEL: No data. UEL: No data.   |
| <b>Autoignition Pt:</b>                  | No data.  |
| <b>Suitable Extinguishing Media:</b>     | Use carbon dioxide, dry powder, water spray, or foam.   |
| <b>Unsuitable Extinguishing Media:</b>   | None known.   |
| <b>Fire Fighting Instructions:</b>       | Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame. |
| <b>Flammable Properties and Hazards:</b> | No flash to boil.<br><br>Contact of liquid or vapor with flame or hot surfaces will produce toxic gases and a corrosive residue that will cause deterioration of metal.   |

Vapors are heavier than air and will tend to collect in low areas.

**6. ACCIDENTAL RELEASE MEASURES**

|   |  |
|---|--|
| <b>Steps To Be Taken In Case Material Is Released Or Spilled:</b> | Isolate the immediate area. Prevent unauthorized entry. Eliminate all sources of ignition in area and downwind of the spill area. Stay upwind, out of low areas, and ventilate closed spaces before entering. All equipment used when handling this product must be grounded or non-sparking. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers. |
|---|--|

**7. HANDLING AND STORAGE**

|   |  |
|---|--|
| <b>Precautions To Be Taken in Handling:</b> | Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.<br><br>Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. A source of clean water should be kept in the immediate work area for flushing of the eyes and skin.<br><br>Keep away from heat, sparks, flame, and any other source of ignition.<br><br>Do not smoke when anywhere near this material.<br><br>Ground and bond containers when transferring material.<br><br>Do not use in confined spaces, basements, bathrooms, etc, where vapors can build up and explode if ignited by an ignition source.<br><br>Vapors are heavier than air and will collect in low areas. |
| <b>Precautions To Be Taken in Storing:</b>  | Store in a cool place in original container and protect from sunlight. Exposure to high temperatures or prolonged exposure to sun may cause can to leak or swell. Once opened, remover should be used within six months or properly disposed of to avoid can   |

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

deterioration. Do not store near flames or at elevated temperatures.

Keep container tightly closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS #   | Partial Chemical Name  | OSHA TWA                              | ACGIH TWA                     | Other Limits |
|---|--|---------------------------------------|-------------------------------|--------------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}   | PEL: 25 ppm<br>STEL: 125 ppm (15 min) | TLV: 50 ppm                   | No data.     |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}  | PEL: 200 ppm                          | TLV: 200 ppm<br>STEL: 250 ppm | No data.     |
| 8052-41-3                                       | Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits}   | PEL: 500 ppm                          | TLV: 100 ppm                  | No data.     |
| <b>Respiratory Equipment (Specify Type):</b>    | <p>For use in areas with inadequate ventilation or fresh air, wear a properly maintained and properly fitted NIOSH approved self-contained breathing apparatus or powered air supply respirator or loose fitting hood.</p> <p>For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.</p> <p>A dust mask does not provide protection against vapors.</p>  |                                       |                               |              |
| <b>Eye Protection:</b>                          | Chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Chemical goggles or face shields are recommended when splashing or spraying of chemical is possible. A faceshield provides more protection to help reduce chemical contact to the face and eyes.   |                                       |                               |              |
| <b>Protective Gloves:</b>                       | Wear gloves with as much resistance to the chemical ingredients as possible. Laminate film gloves offer the best protection. Other glove materials, such as nitrile rubber, neoprene, and PVC will be degraded by methylene chloride, but may provide protection for some amount of time, based on the type of glove and the conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.   |                                       |                               |              |
| <b>Other Protective Clothing:</b>               | Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.   |                                       |                               |              |
| <b>Engineering Controls (Ventilation etc.):</b> | <p>Use only with adequate ventilation to prevent buildup of vapors. If work area is not well ventilated, do not use this product. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas.</p> <p>Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.</p> <p>Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.</p> |                                       |                               |              |
| <b>Work/Hygienic/Maintenance</b>                | A source of clean water should be available in the work area for flushing of the eyes and  |                                       |                               |              |

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

**Practices:**

skin.

Wash hands thoroughly after use.

Do not eat, drink, or smoke in the work area.

Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use.

Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                                      |               |
|---|--------------------------------------|---------------|
| <b>Physical States:</b>                   | [ ] Gas    [ X ] Liquid    [ ] Solid |               |
| <b>Appearance and Odor:</b>               | Viscous opaque to clear              |               |
| <b>Melting Point:</b>                     | No data.                             |               |
| <b>Boiling Point:</b>                     | No data.                             |               |
| <b>Autoignition Pt:</b>                   | No data.                             |               |
| <b>Flash Pt:</b>                          | NP                                   |               |
| <b>Explosive Limits:</b>                  | LEL: No data.                        | UEL: No data. |
| <b>Specific Gravity (Water = 1):</b>      | 1.138                                |               |
| <b>Density:</b>                           | 9.2 - 9.5                            |               |
| <b>Vapor Pressure (vs. Air or mm Hg):</b> | No data.                             |               |
| <b>Vapor Density (vs. Air = 1):</b>       | > 1                                  |               |
| <b>Evaporation Rate:</b>                  | < 1                                  |               |
| <b>Solubility in Water:</b>               | Slight                               |               |
| <b>pH:</b>                                | 10.0 - 10.5                          |               |
| <b>Percent Volatile:</b>                  | 97.33 % by weight.                   |               |
| <b>VOC / Volume:</b>                      | 22.7000 % WT                         |               |

## 10. STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Stability:</b>                                 | Unstable [ ]    Stable [ X ]  |
| <b>Conditions To Avoid - Instability:</b>         | No data available.  |
| <b>Incompatibility - Materials To Avoid:</b>      | Incompatible with strong oxidizing agents; bases; strong caustics; strong acids; oxygen; nitrogen peroxide; reactive metals such as aluminum and magnesium; sodium; potassium; and nitric acid. |
| <b>Hazardous Decomposition Or Byproducts:</b>     | Decomposition may produce carbon monoxide and carbon dioxide, hydrogen chloride, chlorine gas, and small quantities of phosgene.  |
| <b>Possibility of Hazardous Reactions:</b>        | Will occur [ ]    Will not occur [ X ]  |
| <b>Conditions To Avoid - Hazardous Reactions:</b> | No data available.  |

**SAFETY DATA SHEET**  
**Klean Strip Adhesive Remover / Klean Strip**  
**Premium Stripper**

Page: 7  
Printed: 01/21/2015  
Revision: 01/12/2015  
Supersedes Revision: 11/05/2014

**11. TOXICOLOGICAL INFORMATION**

**Toxicological Information:** No information available for this product as a whole.

**Chronic Toxicological Effects:**

CAS# 75-09-2:

Mutagenicity:, Mutation test: DNA damage., Human, 1000. Umol/L, Cell Type: lung..  
Result:

Endocrine: Changes in spleen weight.

Blood:Changes in spleen.

- Mutation Research., Elsevier Science Pub. B.V., POB 211, 1000 AE, Amsterdam  
Netherlands, Vol/p/yr: 538,41, 2003

Tumorigenic Effects:, TCLo, Inhalation, Rat, 3500. PPM, 6 Y.

Result:

Tumorigenic: Carcinogenic by RTECS criteria.

Endocrine: Tumors.

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN  
55802, Vol/p/yr: 4,30, 1984

Standard Draize Test, Eyes, Species: Rabbit, 100.0 MG, Severe.

Result:

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Effects on Newborn: Physical.

- Union Carbide Data Sheet, Union Carbide Corp., 39 Old Ridgebury Rd., Danbury, CT  
06817, Vol/p/yr: 4/25, 1958

Standard Draize Test, Skin, Species: Rabbit, 810.0 MG, 24 H, Severe.

Result:

Specific Developmental Abnormalities: Musculoskeletal system.

- European Journal of Toxicology and Environmental Hygiene., For publisher  
information, see TOERD9, Paris France, Vol/p/yr: 9,171, 1976

CAS# 67-56-1:

Mutagenicity:, Mutation test: DNA damage., Oral, Rat, 10.00 UMOL/KG.

Result:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Tumorigenic:Tumors at site of application.

- Environmental Mutagenesis., For publisher information, see EMMUEG, New York, NY,  
Vol/p/yr: 4,317, 1982

Reports have associated repeated and prolonged occupational overexposure to solvents  
with irreversible brain and nervous system damage.

**Carcinogenicity/Other Information:**

IARC 2B - Possibly Carcinogenic to Humans

ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

| CAS # | Hazardous Components (Chemical Name) | NTP | IARC | ACGIH | OSHA |
|-------|--------------------------------------|-----|------|-------|------|
|-------|--------------------------------------|-----|------|-------|------|

# Klean Strip Adhesive Remover / Klean Strip Premium Stripper

Printed: 01/21/2015

Revision: 01/12/2015

Supersedes Revision: 11/05/2014

|           |  |          |      |      |      |
|-----------|--|----------|------|------|------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}                               | Possible | 2B   | A3   | Yes  |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                                  | n.a.     | n.a. | n.a. | n.a. |
| 8052-41-3 | Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits} | n.a.     | n.a. | n.a. | n.a. |

## 12. ECOLOGICAL INFORMATION

**General Ecological Information:** No information available for this product as a whole.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose in accordance with applicable local, state, and federal regulations.

Keep out of bodies of water.

## 14. TRANSPORT INFORMATION

### LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Consumer commodity  
**DOT Hazard Class:** ORM-D None  
**UN/NA Number:** None

### AIR TRANSPORT (ICAO/IATA):

**ICAO/IATA Shipping Name:** Paint [or] Paint related material  
**UN Number:** 3066 **Packing Group:** II  
**Hazard Class:** 8 - CORROSIVE

**Additional Transport Information:** For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

Limited quantities of 1 liter or less may be allowed depending on the mode of transportation. Refer to 49 CFR, IMDG Code or IATA Dangerous Goods Regulations for this information.

## 15. REGULATORY INFORMATION

**This material meets the EPA** ☒ Yes ☐ No Acute (immediate) Health Hazard  
**'Hazard Categories' defined** ☒ Yes ☐ No Chronic (delayed) Health Hazard  
**for SARA Title III Sections** ☐ Yes ☒ No Fire Hazard  
**311/312 as indicated:** ☐ Yes ☒ No Sudden Release of Pressure Hazard  
☐ Yes ☒ No Reactive Hazard

| CAS #     | Hazardous Components (Chemical Name)   | Other US EPA or State Lists   |
|-----------|--|---|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}                               | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: Yes |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                                  | CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: Yes           |
| 8052-41-3 | Stoddard solvent {Mineral spirits; Aliphatic Petroleum Distillates; White spirits} | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No             |

**SAFETY DATA SHEET**  
**Klean Strip Adhesive Remover / Klean Strip**  
**Premium Stripper**

Page: 9  
Printed: 01/21/2015  
Revision: 01/12/2015  
Supersedes Revision: 11/05/2014

**Regulatory Information:**

**16. OTHER INFORMATION**

**Revision Date:** 01/12/2015

**Preparer Name:** W.M. Barr EHS Dept (901)775-0100

**Additional Information About This Product:** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 1

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |   |                                       |
|-------------------------------|---|---------------------------------------|
| <b>Product Name:</b>          | Klean-Strip Strip X Stripper  |                                       |
| <b>Company Name:</b>          | W. M. Barr<br>2105 Channel Avenue<br>Memphis, TN 38113  | <b>Phone Number:</b><br>(901)775-0100 |
| <b>Web site address:</b>      | www.wmbarr.com  |                                       |
| <b>Emergency Contact:</b>     | 3E 24 Hour Emergency Contact  | (800)451-8346                         |
| <b>Information:</b>           | W.M. Barr Customer Service  | (800)398-3892                         |
| <b>Intended Use:</b>          | Paint/Varnish Remover   |                                       |
| <b>Synonyms:</b>              | GSX6, GSX62, QSX6, QSX64  |                                       |
| <b>Additional Information</b> | This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product. |                                       |

### 2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 2  
Acute Toxicity: Oral, Category 4  
Acute Toxicity: Skin, Category 4  
Acute Toxicity: Inhalation, Category 3  
Skin Corrosion/Irritation, Category 2  
Serious Eye Damage/Eye Irritation, Category 2A  
Carcinogenicity, Category 1B  
Toxic To Reproduction, Category 2  
Specific Target Organ Toxicity (single exposure), Category 1  
Specific Target Organ Toxicity (repeated exposure), Category 2



**GHS Signal Word:** Danger

**GHS Hazard Phrases:** H225: Highly flammable liquid and vapor.  
H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H331: Toxic if inhaled.  
H350: May cause cancer.  
H361: Suspected of damaging fertility or the unborn child.  
H370: Causes damage to organs.  
H373: May cause damage to organs through prolonged or repeated exposure.

**GHS Precaution Phrases:** P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233: Keep container tightly closed.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 2

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

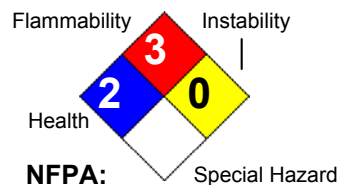
**GHS Response Phrases:**

P260: Do not breathe gas/mist/vapors/spray.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P281: Use personal protective equipment as required.  
P235: Keep cool.  
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P307+311: IF exposed: Call a POISON CENTER or doctor/physician.  
P308+313: IF exposed or concerned: Get medical attention/advice.  
P311: Call a POISON CENTER or doctor/physician.  
P314: Get medical attention/advice if you feel unwell.  
P321: Specific treatment see label.  
P330: Rinse mouth.  
P332+313: If skin irritation occurs, get medical advice/attention.  
P337+313: If eye irritation persists, get medical advice/attention.  
P362: Take off contaminated clothing and wash before re-use.  
P363: Wash contaminated clothing before reuse.  
P370+378: In case of fire, use dry chemical powder to extinguish.  
P403+233: Store container tightly closed in well-ventilated place.  
P405: Store locked up.  
P501: Dispose of contents/container according to local, state and federal regulations.

**GHS Storage and Disposal Phrases:****Hazard Rating System:**

|              |   |   |
|--------------|---|---|
| HEALTH       | * | 2 |
| FLAMMABILITY |   | 3 |
| PHYSICAL     |   | 0 |
| PPE          |   | X |

HMIS:

**OSHA Regulatory Status:**

This material is classified as hazardous under OSHA regulations.

**Potential Health Effects (Acute and Chronic):**

This product has not been tested as a whole to determine health effects. The health effects listed below are associated with the individual ingredients listed in Section 3.

EYES: Causes eye irritation. May cause tearing, redness, stinging or burning, swelling, and blurred vision. May cause corneal injury.

SKIN: May cause effects ranging from mild irritation to severe pain, and possibly burns, depending on the intensity of contact. Skin absorption may occur.

INHALATION: May cause upper respiratory tract irritation and central nervous system depression with symptoms such as confusion, lightheadedness, dizziness, nausea, vomiting, headache, and fatigue. Causes formation of carbon monoxide in blood which may affect the cardiovascular system and central nervous system, and can cause a lack of oxygen in the blood. Continued exposure may cause unconsciousness, coma, and even death.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 3

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

**INGESTION:** May cause nausea, vomiting, and diarrhea. May cause central nervous system excitement, followed by headache, dizziness, and drowsiness. Not expected due to high viscosity, but if vomiting results in aspiration, chemical pneumonia could occur, which may be fatal. Absorption through the gastrointestinal tract may produce central nervous system depression. May cause kidney damage. May cause blurred vision and visual impairment (including blindness).

**CHRONIC OVEREXPOSURE EFFECTS:** May cause liver and kidney damage. May cause cancer based on animal data (methylene chloride). Prolonged or repeated skin contact may cause defatting and dermatitis.

Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain.

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse by deliberately concentrating and inhaling solvents may be harmful or fatal.

### ADDITIONAL DATA:

For Methylene Chloride: Alcohol may enhance the toxic effects. May cross the placenta. May be excreted in breast milk. Concurrent exposure to carbon monoxide, smoking, or physical activity may increase the level of carboxyhemoglobin in the blood resulting in additive effects.

**TARGET ORGANS:** blood, central nervous system, liver, skin, cardiovascular system, eyes, kidney, pancreas, heart, lungs, brain

**PRIMARY ROUTES OF ENTRY:** skin, eyes, inhalation, ingestion

**Medical Conditions Generally Aggravated By Exposure:** Diseases of the blood; skin; eyes; liver; kidneys; lungs; pulmonary system; cardiovascular system and respiratory system; alcoholism and rhythm disorders of the heart.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS #     | Hazardous Components (Chemical Name)                    | Concentration | RTECS #   |
|-----------|---|---------------|-----------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}    | 30.0 -40.0 %  | PA8050000 |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}       | 15.0 -26.0 %  | PC1400000 |
| 67-64-1   | Acetone {2-Propanone}                                   | <10.0 %       | AL3150000 |
| 1330-20-7 | Xylene (mixed isomers) {Benzene, dimethyl-}             | <10.0 %       | ZE2100000 |
| 108-88-3  | Toluene {Benzene, Methyl-; Toluol}                      | <10.0 %       | XS5250000 |
| 100-41-4  | Ethylbenzene {Ethylbenzol; Phenylethane}                | < 5.0 %       | DA0700000 |
| 64-17-5   | Ethyl alcohol {Ethanol}                                 | < 5.0 %       | KQ6300000 |
| 67-63-0   | Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol} | < 5.0 %       | NT8050000 |

**Additional Chemical Information** Specific percentage of composition is being withheld as a trade secret.

**SAFETY DATA SHEET**  
**Klean-Strip Strip X Stripper**

Page: 4

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

## 4. FIRST AID MEASURES

**Emergency and First Aid  
Procedures:**

**Skin:**

Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

**Eyes:**

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate medical attention.

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

**Ingestion:**

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

**Signs and Symptoms Of  
Exposure:**

See Potential Health Effects.

**Note to Physician:**

This product contains methylene chloride and methanol.

This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. Adrenalin should never be given to a person overexposed to methylene chloride.

Methylene Chloride is an aspiration hazard. Risk of aspiration must be weighed against possible toxicity of the material when determining whether to induce emesis or to perform gastric lavage. This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. This material is metabolized to carbon monoxide. Consequently, elevations in carboxyhemoglobin as high as 50% have been reported, and levels may continue to rise for several hours after exposure has ceased. Data in experimental animals suggest there is a narrow margin between concentrations causing anesthesia and death.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 5

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

### 5. FIRE FIGHTING MEASURES

|  |  |
|--|--|
| <b>Flammability Classification:</b>      | 1B   |
| <b>Flash Pt:</b>                         | 30.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)  |
| <b>Explosive Limits:</b>                 | LEL: No data. UEL: No data.  |
| <b>Autoignition Pt:</b>                  | No data.   |
| <b>Suitable Extinguishing Media:</b>     | Use carbon dioxide, dry powder, or alcohol resistant foam.   |
| <b>Unsuitable Extinguishing Media:</b>   | Do not use straight streams of water. If water is used, use a water spray or fog.  |
| <b>Fire Fighting Instructions:</b>       | Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.  |
| <b>Flammable Properties and Hazards:</b> | Danger! Flammable. Keep away from heat, sparks, flame, and all other sources of ignition. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition during use and until all vapors are gone. Beware of static electricity that may be generated by synthetic clothing and other sources. Contact of liquid or vapor with flame or hot surfaces will produce toxic gases and a corrosive residue that will cause deterioration of metal. |

### 6. ACCIDENTAL RELEASE MEASURES

|   |   |
|---|---|
| <b>Steps To Be Taken In Case Material Is Released Or Spilled:</b> | <p>Vapors may cause flash fire or ignite explosively.</p> <p>Clean up: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Use non-sparking tools. Use proper bonding and grounding methods for all equipment and processes. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.</p> <p>Small spills: Take up with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.</p> <p>Large spills: Dike far ahead of spill for later disposal.</p> <p>Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.</p> |
|---|---|

### 7. HANDLING AND STORAGE

|   |   |
|---|---|
| <b>Precautions To Be Taken in Handling:</b> | <p>Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.</p> <p>Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.</p> <p>Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.</p> <p>Do not spread this product over large surface areas because fire and health safety risks</p> |
|---|---|

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 6

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

will increase dramatically.

**Precautions To Be Taken in Storing:**

Store in a cool place in original container and protect from sunlight. Exposure to high temperatures or prolonged exposure to sun may cause can to leak or swell. Once opened, remover should be used within six months or properly disposed of to avoid can deterioration. Do not store near flames or at elevated temperatures.

Keep container tightly closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS #     | Partial Chemical Name                                   | OSHA TWA   | ACGIH TWA                     | Other Limits |
|-----------|---|--|-------------------------------|--------------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}    | PEL: 25 ppm<br>STEL: 125 ppm (15 min)                  | TLV: 50 ppm                   | No data.     |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}       | PEL: 200 ppm   | TLV: 200 ppm<br>STEL: 250 ppm | No data.     |
| 67-64-1   | Acetone {2-Propanone}                                   | PEL: 1000 ppm  | TLV: 500 ppm<br>STEL: 750 ppm | No data.     |
| 1330-20-7 | Xylene (mixed isomers) {Benzene, dimethyl-}             | PEL: 100 ppm   | TLV: 100 ppm<br>STEL: 150 ppm | No data.     |
| 108-88-3  | Toluene {Benzene, Methyl-, Toluol}                      | PEL: 200 ppm<br>STEL: 500 ppm/(10min)<br>CEIL: 300 ppm | TLV: 50 ppm                   | No data.     |
| 100-41-4  | Ethylbenzene {Ethylbenzol; Phenylethane}                | PEL: 100 ppm   | TLV: 100 ppm<br>STEL: 125 ppm | No data.     |
| 64-17-5   | Ethyl alcohol {Ethanol}                                 | PEL: 1000 ppm  | TLV: 1000 ppm                 | No data.     |
| 67-63-0   | Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol} | PEL: 400 ppm   | TLV: 200 ppm<br>STEL: 400 ppm | No data.     |

**Respiratory Equipment (Specify Type):**

For use in areas with inadequate ventilation or fresh air, wear a properly maintained and properly fitted NIOSH approved self-contained breathing apparatus or powered air supply respirator or loose fitting hood.

For OSHA controlled work places and other regular users - Use only with adequate ventilation under engineered air control systems designed to prevent exceeding the appropriate TLV.

A dust mask does not provide protection against vapors.

**Eye Protection:**

Chemical goggles, or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Chemical goggles or face shields are recommended when splashing or spraying of chemical is possible. A faceshield provides more protection to help reduce chemical contact to the face and eyes.

**Protective Gloves:**

Wear gloves with as much resistance to the chemical ingredients as possible. Laminate film gloves offer the best protection. Other glove materials, such as nitrile rubber, neoprene, and PVC will be degraded by methylene chloride, but may provide protection for some amount of time, based on the type of glove and the conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

**Other Protective Clothing:**

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. Before reuse, thoroughly

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 7

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

### Engineering Controls (Ventilation etc.):

clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Use only with adequate ventilation to prevent buildup of vapors. If the work area is not well ventilated, DO NOT use this product. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas.

Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering -- STOP -- ventilation is inadequate. Leave area immediately and move to fresh air.

### Work/Hygienic/Maintenance Practices:

Wash hands thoroughly after use and before eating, drinking, or smoking.

Do not eat, drink, or smoke in the work area.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |   |               |
|---|---|---------------|
| <b>Physical States:</b>                   | [ ] Gas    [ X ] Liquid    [ ] Solid                              |               |
| <b>Appearance and Odor:</b>               | Off-white opaque viscous liquid                                   |               |
| <b>Melting Point:</b>                     | No data.  |               |
| <b>Boiling Point:</b>                     | No data.  |               |
| <b>Autoignition Pt:</b>                   | No data.  |               |
| <b>Flash Pt:</b>                          | 30.00 F    Method Used:    Setaflash Closed Cup (Rapid Setaflash) |               |
| <b>Explosive Limits:</b>                  | LEL: No data.   | UEL: No data. |
| <b>Specific Gravity (Water = 1):</b>      | 1.004   |               |
| <b>Density:</b>                           | 8.346 LB/GL   |               |
| <b>Vapor Pressure (vs. Air or mm Hg):</b> | No data.  |               |
| <b>Vapor Density (vs. Air = 1):</b>       | > 1   |               |
| <b>Evaporation Rate:</b>                  | < 1   |               |
| <b>Solubility in Water:</b>               | Slight  |               |
| <b>Viscosity:</b>                         | 1325 cps  |               |
| <b>pH:</b>                                | 8 - 10  |               |
| <b>Percent Volatile:</b>                  | 95.81 % by weight.  |               |
| <b>VOC / Volume:</b>                      | 25.1400 % WT  |               |

**SAFETY DATA SHEET**  
**Klean-Strip Strip X Stripper**

Page: 8

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

## 10. STABILITY AND REACTIVITY

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid -** Stable

**Instability:**

**Incompatibility - Materials To Avoid:** Bases, oxygen, sodium, potassium, strong oxidizers, reactive metals, strong acids

**Hazardous Decomposition Or Byproducts:** Hydrogen chloride, chlorine, phosgene, carbon monoxide, carbon dioxide

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** This product has not been tested as a whole. Refer to section 2 for acute and chronic effects.

CAS# 75-09-2:  
Tumorigenic Effects:, TCLo, Inhalation, Rat, 3500. PPM, 6 Y.  
Result:  
Tumorigenic: Carcinogenic by RTECS criteria.  
Endocrine: Tumors.  
- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN 55802, Vol/p/yr: 4,30, 1984

Standard Draize Test, Eyes, Species: Rabbit, 100.0 MG, Severe.  
Result:  
Effects on Newborn: Growth statistics (e.g., reduced weight gain).  
Effects on Newborn: Physical.  
- Union Carbide Data Sheet, Union Carbide Corp., 39 Old Ridgebury Rd., Danbury, CT 06817, Vol/p/yr: 4/25, 1958

Standard Draize Test, Skin, Species: Rabbit, 810.0 MG, 24 H, Severe.  
Result:  
Specific Developmental Abnormalities: Musculoskeletal system.  
- European Journal of Toxicology and Environmental Hygiene., For publisher information, see TOERD9, Paris France, Vol/p/yr: 9,171, 1976

CAS# 67-64-1:  
Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, Severe.  
Result:  
Behavioral: Change in motor activity (specific assay).  
Behavioral: Alteration of classical conditioning.  
- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

CAS# 1330-20-7:  
Acute toxicity, LC50, Inhalation, Rat, 5000. PPM, 4 H.  
Result:  
Behavioral: Muscle contraction or spasticity.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 9

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

### Chronic Toxicological Effects:

Lungs, Thorax, or Respiration: Other changes.

- Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,123, 1974

Standard Draize Test, Eyes, Species: Rabbit, 5.000 MG, 24 H, Severe.

Result:

Behavioral: General anesthetic.

Behavioral: Somnolence (general depressed activity).

Behavioral: Irritability.

- "Sbornik Vysledku Toxikologickeho Vysetreni Latek A Pripravku," , Institut Pro Vychovu Vedoucicn P, Marhold, J.V., Institut Pro Vychovu Vedoucicn, Pracovniku Chemickeho, Prumyclu Praha Czechoslovakia, Vol/p/yr: -,24, 1972

CAS# 108-88-3:

Reproductive Effects:, TCLo, Inhalation, Rat, 800.0 MG/M3, 6 H, female 14-20 day(s) after conception.

Result:

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Effects on Newborn: Behavioral.

- Brazilian Journal of Medical and Biological Research., Vol/p/yr: 23,533, 1990

Standard Draize Test, Eyes, Species: Rabbit, 2.000 MG, 24 H, Severe.

Result:

Effects on Embryo or Fetus: Other effects to embryo.

Specific Developmental Abnormalities: Eye, ear.

- Prehled Prumyslove Toxikologie, Marhold, J., Organicke Latky, Prague Czechoslovakia, Vol/p/yr: -,29, 1986

CAS# 100-41-4:

Tumorigenic Effects:, TCLo, Inhalation, Rat, 750.0 ppm.

Result:

Tumorigenic: Carcinogenic by RTECS criteria.

Kidney, Ureter, Bladder: Tumors.

Standard Draize Test, Eyes, Species: Rabbit, 500.0 MG, Severe.

Result:

Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

This product has not been tested as a whole.

### Carcinogenicity/Other Information:

IARC 2B - Possibly Carcinogenic to Humans

IARC 3: Not Classifiable as to Carcinogenicity in Humans

ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

ACGIH A4 - Not Classifiable as a Human Carcinogen.

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 10

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

| CAS #     | Hazardous Components (Chemical Name)                    | NTP      | IARC | ACGIH | OSHA |
|-----------|---|----------|------|-------|------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}    | Possible | 2B   | A3    | Yes  |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}       | n.a.     | n.a. | n.a.  | n.a. |
| 67-64-1   | Acetone {2-Propanone}                                   | n.a.     | n.a. | A4    | n.a. |
| 1330-20-7 | Xylene (mixed isomers) {Benzene, dimethyl-}             | n.a.     | 3    | A4    | n.a. |
| 108-88-3  | Toluene {Benzene, Methyl-; Toluol}                      | n.a.     | 3    | A4    | n.a. |
| 100-41-4  | Ethylbenzene {Ethylbenzol; Phenylethane}                | n.a.     | 2B   | A3    | n.a. |
| 64-17-5   | Ethyl alcohol {Ethanol}                                 | n.a.     | 1    | A4    | n.a. |
| 67-63-0   | Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol} | n.a.     | 3    | A4    | n.a. |

## 12. ECOLOGICAL INFORMATION

**General Ecological Information:** This product has not been tested as a whole.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Dispose in accordance with all applicable local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

### LAND TRANSPORT (US DOT):

**DOT Proper Shipping Name:** Paint Related Material

**DOT Hazard Class:** 3 FLAMMABLE LIQUID

**UN/NA Number:** UN1263

**Packing Group:** II



**Additional Transport Information:** The shipper / supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

## 15. REGULATORY INFORMATION

### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

| CAS #     | Hazardous Components (Chemical Name)                    | S. 302 (EHS) | S. 304 RQ   | S. 313 (TRI) |
|-----------|---|--------------|-------------|--------------|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}    | No           | Yes 1000 LB | Yes          |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}       | No           | Yes 5000 LB | Yes          |
| 67-64-1   | Acetone {2-Propanone}                                   | No           | Yes 5000 LB | No           |
| 1330-20-7 | Xylene (mixed isomers) {Benzene, dimethyl-}             | No           | Yes 100 LB  | Yes          |
| 108-88-3  | Toluene {Benzene, Methyl-; Toluol}                      | No           | Yes 1000 LB | Yes          |
| 100-41-4  | Ethylbenzene {Ethylbenzol; Phenylethane}                | No           | Yes 1000 LB | Yes          |
| 64-17-5   | Ethyl alcohol {Ethanol}                                 | No           | No          | No           |
| 67-63-0   | Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol} | No           | No          | Yes          |

**This material meets the EPA** ☒ Yes ☐ No **Acute (immediate) Health Hazard**  
**'Hazard Categories' defined** ☒ Yes ☐ No **Chronic (delayed) Health Hazard**

# SAFETY DATA SHEET

## Klean-Strip Strip X Stripper

Page: 11

Printed: 04/20/2015

Revision: 04/16/2015

Supersedes Revision: 03/03/2015

for SARA Title III Sections [X] Yes [ ] No Fire Hazard  
311/312 as indicated: [ ] Yes [X] No Sudden Release of Pressure Hazard  
[ ] Yes [X] No Reactive Hazard

| CAS #     | Hazardous Components (Chemical Name)                    | Other US EPA or State Lists   |
|-----------|---|---|
| 75-09-2   | Dichloromethane {Methylene chloride; R-30; Freon 30}    | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: Yes |
| 67-56-1   | Methanol {Methyl alcohol; Carbinol; Wood alcohol}       | CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: Yes           |
| 67-64-1   | Acetone {2-Propanone}                                   | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No     |
| 1330-20-7 | Xylene (mixed isomers) {Benzene, dimethyl-}             | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory; CA PROP.65: No           |
| 108-88-3  | Toluene {Benzene, Methyl-; Toluol}                      | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: Yes |
| 100-41-4  | Ethylbenzene {Ethylbenzol; Phenylethane}                | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 4 Test; CA PROP.65: Yes  |
| 64-17-5   | Ethyl alcohol {Ethanol}                                 | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No             |
| 67-63-0   | Isopropyl alcohol {sec-Propyl alcohol; IPA; 2-Propanol} | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No     |

**Regulatory Information Statement:** All components of this material are listed on the TSCA Inventory or are exempt.

## 16. OTHER INFORMATION

**Revision Date:** 04/16/2015  
**Preparer Name:** W.M. Barr EHS Dept (901)775-0100

**Additional Information About This Product:** No data available.

**Company Policy or Disclaimer:** The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 1

Revision: 05/24/2017  
Supersedes Revision: 04/03/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Klean Strip Lacquer Thinner  
**Company Name:** W. M. Barr  
2105 Channel Avenue  
Memphis, TN 38113  
**Phone Number:** (901)775-0100  
**Web site address:** www.wmbarr.com  
**Emergency Contact:** 3E 24 Hour Emergency Contact (800)451-8346  
**Information:** W.M. Barr Customer Service (800)398-3892  
**Intended Use:** Paint, stain, and varnish thinning.  
**Product Code:** GML170, QML170, CML170, DML170, GML170P, PA12782, QML170W, GML170W, GML170HDWS, PML1701

### 2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 2  
Acute Toxicity: Oral, Category 3  
Acute Toxicity: Skin, Category 3  
Acute Toxicity: Inhalation, Category 3  
Serious Eye Damage/Eye Irritation, Category 2  
Toxic To Reproduction, Category 2  
Specific Target Organ Toxicity (single exposure), Category 1  
Specific Target Organ Toxicity (repeated exposure), Category 2  
Aspiration Toxicity, Category 1



**GHS Signal Word:**

**Danger**

**GHS Hazard Phrases:**

H225: Highly flammable liquid and vapor.  
H301: Toxic if swallowed.  
H304: May be fatal if swallowed and enters airways.  
H311: Toxic in contact with skin.  
H319: Causes serious eye irritation.  
H331: Toxic if inhaled.  
H361: Suspected of damaging fertility or the unborn child.  
H370: Causes damage to organs.  
H373: May cause damage to organs through prolonged or repeated exposure.

**GHS Precaution Phrases:**

P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233: Keep container tightly closed.  
P240: Ground/bond container and receiving equipment.  
P241: Use explosion-proof electrical/ventilating/lighting equipment.  
P242: Use only non-sparking tools.  
P243: Take precautionary measures against static discharge.  
P260: Do not breathe gas/mist/vapors/spray.  
P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P281: Use personal protective equipment as required.  
P235: Keep cool.

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 2

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

### GHS Response Phrases:

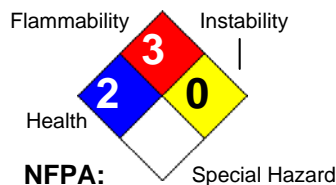
P301+310: IF SWALLOWED: Immediately P311: Call a POISON CENTER or doctor/physician.  
P302+352: IF ON SKIN: Wash with plenty of soap and water.  
P303+361+353: IF ON SKIN (or hair): P361: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P307+311: IF exposed: P311: Call a POISON CENTER or doctor/physician.  
P308+313: IF exposed or concerned: Get medical attention/advice.  
P314: Get medical attention/advice if you feel unwell.  
P321: Specific treatment see label.  
P330: Rinse mouth.  
P331: Do NOT induce vomiting.  
P337+313: If eye irritation persists, get medical advice/attention.  
P363: Wash contaminated clothing before reuse.  
P370+378: In case of fire, use dry chemical powder to extinguish.

### GHS Storage and Disposal Phrases:

P403+233: Store container tightly closed in well-ventilated place.  
P405: Store locked up.  
P501: Dispose of contents/container according to local, state and federal regulations.

### Hazard Rating System:

|              |   |   |
|--------------|---|---|
| HEALTH       | * | 2 |
| FLAMMABILITY |   | 3 |
| PHYSICAL     |   | 0 |
| PPE          |   | X |



HMIS:

### OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

### Potential Health Effects (Acute and Chronic):

#### Inhalation Acute Exposure Effects:

Vapor harmful. May cause dizziness; headache; watering of eyes; irritation of respiratory tract; weakness; drowsiness; nausea; numbness in fingers, arms and legs; depression of central nervous system; loss of appetite; fatigue; hallucinations; light headedness; visual disturbances; giddiness and intoxication; sleepiness; cough and dyspnea; cold, clammy extremities; diarrhea; vomiting; dilation of pupils; spotted vision. Severe overexposure may cause convulsions; unconsciousness; coma; and death. Intentional misuse of this product by deliberately concentrating and inhaling can be harmful or fatal.

#### Skin Contact Acute Exposure Effects:

May be absorbed through the skin. May cause irritation; numbness in the fingers and arms; drying of skin; and dermatitis. May cause increased severity of symptoms listed under inhalation.

#### Eye Contact Acute Exposure Effects:

This material is an eye irritant. May cause irritation; burns; conjunctivitis of eyes; and corneal ulcerations of the eye. Vapors may irritate eyes.

#### Ingestion Acute Exposure Effects:

Poison. Cannot be made non-poisonous. May be fatal or cause blindness. May cause dizziness; headache; nausea; vomiting; burning sensation in mouth, throat, and stomach; loss of coordination; depression of the central nervous system; narcosis; stupor; gastrointestinal irritation; liver, kidney, and heart damage; diarrhea; loss of appetite; coma and death. May produce symptoms listed under inhalation.

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 3

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

### Chronic Exposure Effects:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Prolonged or repeated contact may cause dermatitis. Prolonged skin contact may result in absorption of a harmful amount of this material. May cause conjunctivitis; gastric disturbances; insomnia; dizziness; headache; weakness; fatigue; nausea; heart palpitations; skin irritation; numbness in hands and feet; permanent central nervous system changes; some loss of memory; pancreatic damage; giddiness; visual impairment or blindness; kidney or liver damage; and death. May cause symptoms listed under inhalation.

Target Organs: Central Nervous System, Liver, Kidney, Heart, Stomach, Respiratory System

Primary Routes of Entry: Inhalation, Ingestion, Skin Absorption

**Medical Conditions Generally Aggravated By Exposure:** Diseases of the skin, eyes, liver, kidneys, central nervous system and respiratory system.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS #    | Hazardous Components (Chemical Name)                                 | Concentration |
|----------|--|---------------|
| 67-56-1  | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                    | 25.0 -35.0 %  |
| 67-64-1  | Acetone {2-Propanone}  | 20.0 -30.0 %  |
| NA       | Petroleum Hydrocarbon Mixture (Alkanes and Cycloalkanes)             | 20.0 -30.0 %  |
| 141-78-6 | Acetic acid, ethyl ester {Ethyl acetate}                             | <15.0 %       |
| 108-88-3 | Toluene {Benzene, Methyl-; Toluol}                                   | < 5.0 %       |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | < 5.0 %       |

### Additional Chemical Information

Specific percentage of composition is being withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Emergency and First Aid Procedures:

##### Skin:

Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

##### Eyes:

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate medical attention.

##### Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

##### Ingestion:

If swallowed, do not induce vomiting. Seek immediate medical attention. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.

#### In Case of Inhalation:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 4

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

|  |   |
|--|---|
| <b>In Case of Skin Contact:</b>        | IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.  |
| <b>In Case of Eye Contact:</b>         | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  |
| <b>In Case of Ingestion:</b>           | If swallowed, do NOT induce vomiting. Call a physician, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person.   |
| <b>Signs and Symptoms Of Exposure:</b> | See Potential Health Effects.   |
| <b>Note to Physician:</b>              | Poison. This product contains methanol. Methanol is metabolized to formaldehyde and formic acid. These metabolites may cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis. Call your local poison control center for further information. |

### 5. FIRE FIGHTING MEASURES

|  |   |
|--|---|
|  | NFPA Class IB   |
| <b>Flash Pt:</b>                         | < 15.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)   |
| <b>Explosive Limits:</b>                 | LEL: 1 UEL: 7   |
| <b>Autoignition Pt:</b>                  | No data.  |
| <b>Suitable Extinguishing Media:</b>     | Use carbon dioxide, dry powder, or foam.  |
| <b>Unsuitable Extinguishing Media:</b>   | Do not use a solid water stream, as this may spread the fire.   |
| <b>Fire Fighting Instructions:</b>       | Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame. |
| <b>Flammable Properties and Hazards:</b> | No data available.  |

### 6. ACCIDENTAL RELEASE MEASURES

|   |   |
|---|---|
| <b>Steps To Be Taken In Case Material Is Released Or Spilled:</b> | <p>Vapors may cause flash fire or ignite explosively.</p> <p>Clean up: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources; keep flares, smoking or flames out of hazard area. Use non-sparking tools. Use proper bonding and grounding methods for all equipment and processes. Keep out of waterways and bodies of water. Be cautious of vapors collecting in small enclosed spaces, sewers, low lying areas, confined spaces, etc.</p> <p>Small spills: Take up with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.</p> <p>Large spills: Dike far ahead of spill for later disposal.</p> <p>Waste Disposal: Dispose in accordance with applicable local, state and federal regulations.</p> |
|---|---|

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 5

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

### 7. HANDLING AND STORAGE

**Precautions To Be Taken in Handling:**

Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty.

Dispose of empty container according to all regulations. Do not reuse this container.

Do not use this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc.

Do not use in small enclosed spaces, such as basements and bathrooms. Vapors can accumulate and explode if ignited.

Do not spread this product over large surface areas because fire and health safety risks will increase dramatically.

**Precautions To Be Taken in Storing:**

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS #    | Partial Chemical Name  | OSHA TWA   | ACGIH TWA                     | Other Limits |
|----------|--|--|-------------------------------|--------------|
| 67-56-1  | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                    | PEL: 200 ppm   | TLV: 200 ppm<br>STEL: 250 ppm | No data.     |
| 67-64-1  | Acetone {2-Propanone}  | PEL: 1000 ppm  | TLV: 500 ppm<br>STEL: 750 ppm | No data.     |
| NA       | Petroleum Hydrocarbon Mixture (Alkanes and Cycloalkanes)             | No data.   | TLV: 1500 mg/m3               | No data.     |
| 141-78-6 | Acetic acid, ethyl ester {Ethyl acetate}                             | PEL: 400 ppm   | TLV: 400 ppm                  | No data.     |
| 108-88-3 | Toluene {Benzene, Methyl-; Toluol}                                   | PEL: 200 ppm<br>STEL: 500 ppm/(10min)<br>CEIL: 300 ppm | TLV: 50 ppm                   | No data.     |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | PEL: 50 ppm  | TLV: 20 ppm                   | No data.     |

**Respiratory Equipment (Specify Type):**

For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV.

For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors.

**Eye Protection:**

Protect eyes with chemical splash goggles.

**Protective Gloves:**

Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile rubber may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

**Other Protective Clothing:**

Various application methods can dictate use of additional protective safety equipment,

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 6

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

### Engineering Controls (Ventilation etc.):

such as impermeable aprons, etc., to minimize exposure.

Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering - Stop - ventilation is inadequate. Leave area immediately.

### Work/Hygienic/Maintenance Practices:

Do not use in small enclosed spaces, such as basements and bathrooms.

A source of clean water should be available in the work area for flushing eyes and skin.

Do not eat, drink, or smoke in the work area.

Wash hands thoroughly after use.

Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use.

Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |   |
|---|---|
| <b>Physical States:</b>                   | [ ] Gas [ X ] Liquid [ ] Solid                                |
| <b>Appearance and Odor:</b>               | Water White / Free and Clear                                  |
| <b>Melting Point:</b>                     | No data.  |
| <b>Boiling Point:</b>                     | 133.00 F  |
| <b>Autoignition Pt:</b>                   | No data.  |
| <b>Flash Pt:</b>                          | < 15.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash) |
| <b>Explosive Limits:</b>                  | LEL: 1 UEL: 7   |
| <b>Specific Gravity (Water = 1):</b>      | 0.7742 - 0.7942   |
| <b>Density:</b>                           | 6.518 LB/GL   |
| <b>Vapor Pressure (vs. Air or mm Hg):</b> | 115 MM HG at 68.0 F   |
| <b>Vapor Density (vs. Air = 1):</b>       | > 1   |
| <b>Evaporation Rate:</b>                  | > 1   |
| <b>Solubility in Water:</b>               | Slight  |
| <b>Viscosity:</b>                         | Water thin  |
| <b>Percent Volatile:</b>                  | 100.0 % by weight.  |
| <b>VOC / Volume:</b>                      | 600.0000 G/L  |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Stability:</b>                                 | Unstable [ ] Stable [ X ]  |
| <b>Conditions To Avoid - Instability:</b>         | No data available.   |
| <b>Incompatibility - Materials To Avoid:</b>      | Incompatible with strong oxidizing agents, strong caustics, hydrogen peroxide, and nitrates. |
| <b>Hazardous Decomposition or Byproducts:</b>     | Decomposition may produce carbon monoxide; carbon dioxide                                    |
| <b>Possibility of Hazardous Reactions:</b>        | Will occur [ ] Will not occur [ X ]  |
| <b>Conditions To Avoid - Hazardous Reactions:</b> | No data available.   |

## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** This product has not been tested as a whole. Information below will be for individual ingredients. Refer to section 2 for acute and chronic effects.

CAS# 67-64-1:

Standard Draize Test, Eyes, Species: Rabbit, 20.00 MG, Severe.

Result:

Behavioral: Change in motor activity (specific assay).

Behavioral: Alteration of classical conditioning.

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave.,  
Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

CAS# 141-78-6:

Standard Draize Test, Eyes, Human, 400.0 PPM.

Result:

Liver: Hepatitis (hepatocellular necrosis), zonal.

- Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 25,282, 1943

CAS# 108-88-3:

Reproductive Effects:, TCLO, Inhalation, Rat, 800.0 MG/M3, 6 H, female 14-20 day(s)  
after conception.

Result:

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Effects on Newborn: Behavioral.

- Brazilian Journal of Medical and Biological Research., Vol/p/yr: 23,533, 1990

Standard Draize Test, Eyes, Species: Rabbit, 2.000 MG, 24 H, Severe.

Result:

Effects on Embryo or Fetus: Other effects to embryo.

Specific Developmental Abnormalities: Eye, ear.

- Prehled Prumyslove Toxikologie, Marhold, J., Organické Latky, Prague  
Czechoslovakia, Vol/p/yr: -,29, 1986

CAS# 111-76-2:

Acute toxicity, LC50, Inhalation, Rat, 450.0 PPM, 4 H.

Result:

Behavioral: Ataxia.

Nutritional and Gross Metabolic: Weight loss or decreased weight gain.

- Toxicology and Applied Pharmacology, Academic Press, Inc., 1 E. First St., Duluth, MN  
55802, Vol/p/yr: 68,405, 1983

Acute toxicity, LD50, Skin, Species: Rabbit, 220.0 MG/KG.

Result:

Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord).

Effects on Embryo or Fetus: Other effects to embryo.

Specific Developmental Abnormalities: Musculoskeletal system.

- Dow Chemical Company Reports., Dow Chemical USA, Health and Environment  
Research, Toxicology Research Lab, Midland, MI 48640, Vol/p/yr: MSD-46,

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 8

Revision: 05/24/2017  
Supersedes Revision: 04/03/2017

### Chronic Toxicological Effects:

Acute toxicity, LD50, Oral, Rat, 250.0 mg/kg.  
Result:  
Lungs, Thorax, or Respiration: Changes in pulmonary vascular resistance.

Standard Draize Test, Eyes, Species: Rabbit, 100.0 MG, Severe.

Result:

Effects on Newborn: Apgar score (human only).

Effects on Newborn: Other neonatal measures or effects.

Effects on Newborn: Drug dependency.

- American Journal of Ophthalmology., Ophthalmic Pub. Co., 435 N. Michigan Ave., Suite 1415, Chicago, IL 60611, Vol/p/yr: 29,1363, 1946

### Carcinogenicity/Other Information:

IARC 3: Not Classifiable as to Carcinogenicity in Humans  
ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans  
ACGIH A4 - Not Classifiable as a Human Carcinogen

| CAS #    | Hazardous Components (Chemical Name)                                 | NTP  | IARC | ACGIH | OSHA |
|----------|--|------|------|-------|------|
| 67-56-1  | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                    | n.a. | n.a. | n.a.  | n.a. |
| 67-64-1  | Acetone {2-Propanone}  | n.a. | n.a. | A4    | n.a. |
| NA       | Petroleum Hydrocarbon Mixture (Alkanes and Cycloalkanes)             | n.a. | n.a. | n.a.  | n.a. |
| 141-78-6 | Acetic acid, ethyl ester {Ethyl acetate}                             | n.a. | n.a. | n.a.  | n.a. |
| 108-88-3 | Toluene {Benzene, Methyl-; Toluol}                                   | n.a. | 3    | A4    | n.a. |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | n.a. | 3    | A3    | n.a. |

## 12. ECOLOGICAL INFORMATION

### General Ecological Information:

This product has not been tested as a whole. Information below will be for individual ingredients.

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Method:

Dispose of in accordance with all applicable local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

### LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Paint Related Material

DOT Hazard Class: 3 FLAMMABLE LIQUID

UN/NA Number: UN1263

Packing Group: II



### Additional Transport Information:

The shipper/supplier may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

# SAFETY DATA SHEET

## Klean Strip Lacquer Thinner

Page: 9

Revision: 05/24/2017  
Supersedes Revision: 04/03/2017

### 15. REGULATORY INFORMATION

#### EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

| CAS #    | Hazardous Components (Chemical Name)                                 | S. 302 (EHS) | S. 304 RQ   | S. 313 (TRI)  |
|----------|--|--------------|-------------|---------------|
| 67-56-1  | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                    | No           | Yes 5000 LB | Yes           |
| 67-64-1  | Acetone {2-Propanone}  | No           | Yes 5000 LB | No            |
| NA       | Petroleum Hydrocarbon Mixture (Alkanes and Cycloalkanes)             | No           | No          | No            |
| 141-78-6 | Acetic acid, ethyl ester {Ethyl acetate}                             | No           | Yes 5000 LB | No            |
| 108-88-3 | Toluene {Benzene, Methyl-; Toluol}                                   | No           | Yes 1000 LB | Yes           |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | No           | No          | Yes-Cat. N230 |

**This material meets the EPA** ☒ Yes ☐ No Acute (immediate) Health Hazard  
**'Hazard Categories' defined** ☒ Yes ☐ No Chronic (delayed) Health Hazard  
**for SARA Title III Sections** ☒ Yes ☐ No Fire Hazard  
**311/312 as indicated:** ☐ Yes ☒ No Sudden Release of Pressure Hazard  
☐ Yes ☒ No Reactive Hazard

| CAS #    | Hazardous Components (Chemical Name)                                 | Other US EPA or State Lists   |
|----------|--|---|
| 67-56-1  | Methanol {Methyl alcohol; Carbinol; Wood alcohol}                    | CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: Yes: RDTox.             |
| 67-64-1  | Acetone {2-Propanone}  | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No                       |
| NA       | Petroleum Hydrocarbon Mixture (Alkanes and Cycloalkanes)             | CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: Yes                                   |
| 141-78-6 | Acetic acid, ethyl ester {Ethyl acetate}                             | CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No                       |
| 108-88-3 | Toluene {Benzene, Methyl-; Toluol}                                   | CAA HAP,ODC: HAP; CWA NPDES: Yes; TSCA: Yes - Inventory, 8A CAIR; CA PROP.65: Yes: RDTox(F) |
| 111-76-2 | Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | CAA HAP,ODC: Yes - Cat.; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No               |

**Regulatory Information:** This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

### 16. OTHER INFORMATION

**Revision Date:** 05/24/2017  
**Preparer Name:** W.M. Barr EHS Dept (901)775-0100

**Additional Information About** No data available.

**This Product:**

**Company Policy or Disclaimer:** The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability

**SAFETY DATA SHEET**  
**Klean Strip Lacquer Thinner**

Page: 10

Revision: 05/24/2017

Supersedes Revision: 04/03/2017

and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.



## Safety Data Sheet

### 1 - Identification

|  |   |
|--|---|
| <b>Product Name:</b> 3-IN-ONE® All-Temp Silicone | <b>Manufacturer:</b> WD-40 Company  |
| <b>Product Use:</b> Lubricant, Protectant        | <b>Address:</b> 9715 Businesspark Avenue<br>San Diego, California, USA<br>92131           |
| <b>Restrictions on Use:</b> None identified      | <b>Telephone:</b>   |
| <b>SDS Date Of Preparation:</b> July 18, 2018    | <b>Emergency:</b> 1-888-324-7596  |
|  | <b>Information:</b> 1-888-324-7596  |
|  | <b>Chemical Spills:</b> 1-800-424-9300 (Chemtrec)<br>1-703-527-3887 (International Calls) |

### 2 – Hazards Identification

#### Hazcom 2012/GHS Classification:

Flammable Liquid Category 4

Aspiration Toxicity Category 1

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

#### Label Elements:



#### DANGER!

Combustible Liquid.

May be fatal if swallowed and enters airways.

#### Prevention

Keep away from flames and hot surfaces. -No smoking.

Wear protective gloves.

#### Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish.

#### Storage

Store in a well-ventilated place. Keep cool.

Store locked up.

#### Disposal

Dispose of contents and container in accordance with local and national regulations.

### 3 - Composition/Information on Ingredients

| Ingredient                | CAS #      | Weight Percent | US Hazcom 2012/ GHS Classification                            |
|---------------------------|------------|----------------|---|
| LVP Aliphatic Hydrocarbon | 64742-47-8 | 85-95%         | Flammable Liquid Category 4<br>Aspiration Toxicity Category 1 |
| Poly(dimethylsiloxane)    | 63148-62-9 | 1-5%           | Not Hazardous   |

Note: The exact percentages are a trade secret.

#### 4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Signs and Symptoms of Exposure:** Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye irritation.

**Indication of Immediate Medical Attention/Special Treatment Needed:** Immediate medical attention is needed for ingestion.

#### 5 – Fire Fighting Measures

**Suitable (and unsuitable) Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Specific Hazards Arising from the Chemical:** Combustible liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.

#### 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

**Methods and Materials for Containment/Cleanup:** Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

#### 7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class IIIA Liquid.

#### 8 – Exposure Controls/Personal Protection

| Chemical                                      | Occupational Exposure Limits                          |
|---|---|
| LVP Petroleum Distillates, hydrotreated light | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended) |
| Poly(dimethylsiloxane)                        | None Established                                      |

#### The Following Controls are Recommended for Normal Consumer Use of this Product

**Appropriate Engineering Controls:** Use in a well-ventilated area.

**Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact.

**Skin Protection:** Avoid prolonged skin contact.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

#### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

**Personal Protection:**

**Eye Protection:** Safety goggles recommended where eye contact is possible.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

### 9 – Physical and Chemical Properties

|                            |                                  |   |                            |
|----------------------------|----------------------------------|---|----------------------------|
| Appearance:                | Light brown liquid               | Flammable Limits:<br>(Solvent Portion)      | LEL: 0.6% UEL: 5.0%        |
| Odor:                      | Mild odor                        | Vapor Pressure:                             | 0.07 mmHg @ 68°F<br>(20°C) |
| Odor Threshold:            | Not established                  | Vapor Density:                              | Greater than 1 (air=1)     |
| pH:                        | Not Applicable                   | Relative Density:                           | 0.76-0.84                  |
| Melting/Freezing Point:    | Not established                  | Solubilities:                               | Insoluble in water         |
| Boiling Point/Range:       | 430 - 520°F (221 -<br>271°C)     | Partition Coefficient; n-<br>octanol/water: | Not established            |
| Flash Point:               | 191°F (88.3°C) Tag<br>Closed Cup | Autoignition<br>Temperature:                | Not established            |
| Evaporation Rate:          | Not established                  | Decomposition<br>Temperature:               | Not established            |
| Flammability (solid, gas): | Not Applicable                   | Viscosity:                                  | 3.8 cSt @ 104°F (40°C)     |
| VOC:                       | <7.64-8.4 g/L (<1%)              | Pour Point:                                 | -39°C (-38°F )             |

### 10 – Stability and Reactivity

**Reactivity:** Not reactive under normal conditions

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** May react with strong oxidizers generating heat.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

### 11 – Toxicological Information

**Symptoms of Overexposure:**

**Inhalation:** High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

**Skin Contact:** Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

**Eye Contact:** Contact may be irritating to eyes. May cause redness and tearing.

**Ingestion:** This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

**Chronic Effects:** None expected.

**Carcinogen Status:** None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

**Reproductive Toxicity:** None of the components is considered a reproductive hazard.

**Numerical Measures of Toxicity:**

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg and the dermal toxicity greater than 2000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

### 12 – Ecological Information

**Ecotoxicity:** LVP Petroleum Distillates, hydrotreated light and poly(dimethylsiloxane) are not expected to be harmful to aquatic organisms.

**Persistence and Degradability:** LVP Petroleum Distillates, hydrotreated light) is expected to be readily biodegradable.  
**Bioaccumulative Potential:** Bioaccumulation is not expected based on an assessment of the ingredients.  
**Mobility in Soil:** No data available  
**Other Adverse Effects:** None known

### 13 - Disposal Considerations

If this product becomes a waste, it would not be expected to meet the criteria of a RCRA hazardous waste. However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

### 14 – Transportation Information

DOT Surface Shipping Description: Excepted from Hazmat (49CFR 173.150 (F)) in non-bulk packagings  
Bulk Packagings: NA1993, Combustible Liquid, n.o.s. (contains Petroleum Distillates), PG III  
IMDG Shipping Description: Not Regulated  
ICAO Shipping Description: Not Regulated

NOTE: WD-40 Company does not test containers to assure that they can withstand the pressure change without leakage when transported by air. We do not recommend that our products be transported by air unless a specific review is conducted.

### 15 – Regulatory Information

#### U.S. Federal Regulations:

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

#### SARA TITLE III:

**Hazard Category For Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):** This product does not require a California Proposition 65 warning.

**VOC Regulations:** This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

**Canadian Environmental Protection Act:** One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

### 16 – Other Information

#### HMIS Hazard Rating:

**Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Physical Hazard – 0 (minimal hazard)**

Revision Date: July 18, 2018

Supersedes: April 4, 2018

Revision Summary: Address and telephone number update in Section 1.

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed By: I. Kowalski

Regulatory Affairs Manager

1080200/No.0082904

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA &amp; 2001/58/EC standards.



Revision 1.1

11/01/06

## 1. PRODUCT IDENTIFICATION

## CHEMICAL RESPONSE CARD:

|     |                         |   |
|-----|-------------------------|---|
| 1.1 | Product Name:           | <b>303 AEROSPACE PROTECTANT™</b>                      |
| 1.2 | Chemical Name:          | See ingredients listed in section 2                   |
| 1.3 | Synonyms:               | None reported by the manufacturer                     |
| 1.4 | Trade Names:            | 303 AEROSPACE PROTECTANT                              |
| 1.5 | Product Use:            | Protectant  |
| 1.6 | Manufacturer's Name:    | 303 Products, Inc.                                    |
| 1.7 | Manufacturer's Address: | 10801 Starwood Drive, Palo Cedro, CA 96073            |
| 1.8 | Business Phone:         | +1 (530) 549-5617                                     |
| 1.9 | Emergency Phone:        | <b>CHEMTREC +1 (800) 424-9300 / +1 (703) 527-3887</b> |

|                             |   |   |  |  |
|-----------------------------|---|---|--|--|
| <b>RESPONSE TEAM PPE:</b>   |  |  |  |  |
| <b>WHMIS:</b>               |   |   |  |  |
| <b>HEALTH:</b>              | <b>1</b>  |   |  |  |
| <b>FLAMMABILITY:</b>        | <b>0</b>  |   |  |  |
| <b>REACTIVITY:</b>          | <b>0</b>  |   |  |  |
| <b>PERSONAL PROTECTION:</b> | <b>B</b>  |   |  |  |

## 2. IDENTIFICATION OF RISKS

|     |                           |  |                             |                       |
|-----|---------------------------|--|-----------------------------|-----------------------|
| 2.1 | Hazard Identification:    | This product is not classified as a hazardous substance or as dangerous goods according to the classification criteria of NOHSC and the ADG Code (Australia). In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from CHEMTREC or the U.S. manufacturer, and show them this Material Safety Data Sheet. |                             |                       |
| 2.2 | Routes of Entry:          | <b>INHALATION:</b> NO  | <b>SKIN &amp; EYES:</b> YES | <b>INGESTION:</b> YES |
| 2.3 | Effects of Exposure:      | <b>EYES:</b> Possible irritation and burning sensation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash).<br><b>INGESTION:</b> Possible gastrointestinal irritation, nausea, vomiting or diarrhea.<br><b>INHALATION:</b> No adverse health effects expected.  |                             |                       |
| 2.4 | Symptoms of Exposure:     | <b>EYES:</b> Irritation and burning sensation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash), characterized by red, dry, itching skin.<br><b>INGESTION:</b> Gastrointestinal discomfort, nausea, vomiting, and headache.<br><b>INHALATION:</b> No adverse health effects expected.   |                             |                       |
| 2.5 | Acute Health Effects:     | <b>EYES:</b> Irritation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash).<br><b>INGESTION:</b> Possible gastrointestinal irritation, nausea, vomiting or diarrhea.<br><b>INHALATION:</b> No adverse health effects expected.   |                             |                       |
| 2.6 | Chronic Health Effects:   | None known.  |                             |                       |
| 2.7 | Target Organs:            | None reported by the manufacturer.   |                             |                       |
| 2.8 | Toxicological Properties: | None reported by the manufacturer.   |                             |                       |

## 3. COMPOSITION &amp; INGREDIENTS

| COMPOSITION  | CAS No. | RTECs No. | EINECS No. | %  | EXPOSURE LIMITS IN AIR (mg/m³) |      |            |      |        |
|--------------|---------|-----------|------------|----|--------------------------------|------|------------|------|--------|
|              |         |           |            |    | ACGIH - ppm                    |      | OSHA - ppm |      | OTHERS |
|              |         |           |            |    | TLV                            | STEL | PEL        | STEL |        |
| Trade Secret | NA      | NA        | NA         | NA | NA                             | NA   | NA         | NA   | NA     |
|              |         |           |            |    |                                |      |            |      |        |

## 4. FIRST AID

|     |  |   |
|-----|--|---|
| 4.1 | First Aid:                                 | <b>EYES:</b> Flush eyes thoroughly with copious amounts of water for at least 20 minutes, holding eyelids open to ensure complete flushing. If irritation persists, contact a physician.<br><b>SKIN:</b> Wash affected areas with soap and water. If irritation persists, contact a physician. Launder clothing before reuse.<br><b>INGESTION:</b> If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.<br><b>INHALATION:</b> Remove victim to fresh air at once. |
| 4.2 | Medical Conditions Aggravated by Exposure: | None known.   |

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA &amp; 2001/58/EC standards.

Revision 1.1

11/01/06

**5. FIRE & EXPLOSION HAZARDS**

|     |                           |  |                |                              |                |
|-----|---------------------------|--|----------------|------------------------------|----------------|
| 5.1 | Flashpoint & Method:      | Not flammable.   |                |                              |                |
| 5.2 | Autoignition Temperature: | Not Applicable   |                |                              |                |
| 5.3 | Flammability Limits:      | Lower Explosive Limit (LEL):   | Not Applicable | Upper Explosive Limit (UEL): | Not Applicable |
| 5.4 | Fire & Explosion Hazards: | None known.  |                |                              |                |
| 5.5 | Extinguishing Methods:    | CO <sub>2</sub> , sand, dry chemical or other approved fire extinguishing media, foam, and indirect water spray or fog.  |                |                              |                |
| 5.6 | Firefighting Procedures:  | Poses no unusual fire or explosion hazard. Keep containers cool until well after the fire is out. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters should wear full-face, self-contained breathing apparatus (MSHA/NIOSH approved or the equivalent) and impervious clothing. |                |                              |                |

**6. SPILLS & LEAKS**

|     |         |  |
|-----|---------|--|
| 6.1 | Spills: | Secure spill area and maximize ventilation. Stop spill or leak at source if safely possible. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective equipment. Recover free liquid or cover with inert absorbent material and place into appropriate container(s) for disposal. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers or any natural waterway or drinking supply. |
|-----|---------|--|

**7. STORAGE & HANDLING**

|     |                           |   |
|-----|---------------------------|---|
| 7.1 | Work & Hygiene Practices: | Use normal hygiene practices. Avoid breathing vapors. Avoid direct skin contact. Wash hands thoroughly after using this product and before eating, drinking, or smoking.                                |
| 7.2 | Storage & Handling:       | Use and store in a cool, dry, well-ventilated area. Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Do not store in unmarked containers or storage devices. |
| 7.3 | Special Precautions:      | Readily available emergency fire, first aid, and spill response equipment and/or measures are highly recommended.   |

**8. EXPOSURE CONTROL & PERSONAL PROTECTION**

|     |                                     |   |
|-----|-------------------------------------|---|
| 8.1 | Ventilation & Engineering Controls: | General mechanical ventilation is sufficient for use with this product. Local exhaust is recommended in enclosed or confined spaces.                |
| 8.2 | Respiratory Protection:             | A respiratory protection program that meets ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.       |
| 8.3 | Eye Protection:                     | Safety glasses with side shields should be used with this product. If splashing is anticipated, splash goggles and a faceshield are recommended.    |
| 8.4 | Hand Protection:                    | Where contact is likely, impervious gloves are recommended. Do not wear rings, watches, or jewelry that could entrap the material against the skin. |
| 8.5 | Body Protection:                    | None required under normal conditions.  |



# MATERIAL SAFETY DATA SHEET

Page 3 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 9. PHYSICAL & CHEMICAL PROPERTIES

|      |                                     |                              |
|------|-------------------------------------|------------------------------|
| 9.1  | Density:                            | 1.01 - 1.02                  |
| 9.2  | Boiling Point:                      | $\geq 100^{\circ}\text{C}$   |
| 9.3  | Melting Point:                      | $\leq 1.0^{\circ}\text{C}$   |
| 9.4  | Evaporation Rate:                   | $\leq 1.0$ (water = 1)       |
| 9.5  | Vapor Pressure @ 20°C:              | 17 mm Hg                     |
| 9.6  | Molecular Weight:                   | Not Available                |
| 9.7  | Appearance & Colour:                | Milky, white liquid          |
| 9.8  | Odour Threshold:                    | Mild odor                    |
| 9.9  | Solubility:                         | Fully soluble                |
| 9.10 | pH:                                 | 9.79                         |
| 9.11 | Viscosity:                          | Not Available                |
| 9.12 | Coefficient Oil/Water Distribution: | Not Available                |
| 9.13 | Additional Information:             | Vapor density 3.2 (Air =1.0) |

## 10. STABILITY & REACTIVITY

|      |                          |   |
|------|--------------------------|---|
| 10.1 | Stability:               | Stable under normal conditions.   |
| 10.2 | Decomposition Products:  | Heat and carbon dioxide.  |
| 10.3 | Polymerization:          | Will not occur.   |
| 10.4 | Conditions to Avoid:     | Close proximity to incompatible substances (e.g., alkalis, strong oxidizers). |
| 10.5 | Incompatible Substances: | None reported by the manufacturer.  |

## 11. TOXICOLOGICAL INFORMATION

|      |                              |   |
|------|------------------------------|---|
| 11.1 | Toxicity Data:               | No general or specific toxicity data has been reported by the manufacturer other than the information presented in Section 2. However, good personal hygiene practices, such as washing any skin contact areas and removing contaminated clothing, are recommended. |
| 11.2 | Acute Toxicity:              | See section 2.5   |
| 11.3 | Chronic Toxicity:            | See section 2.6   |
| 11.4 | Suspected Carcinogen:        | No  |
| 11.5 | Reproductive Toxicity:       | This product is not expected to cause reproductive harm in humans.  |
|      | Mutagenicity:                | This product is not expected to cause mutagenic effects in humans.  |
|      | Embryotoxicity:              | This product is not expected to cause embryotoxic effects in humans.  |
|      | Teratogenicity:              | This product is not expected to cause teratogenic effects in humans.  |
|      | Reproductive Toxicity:       | This product is not expected to cause reproductive harm in humans.  |
| 11.6 | Irritancy of Product:        | Not Available   |
| 11.7 | Biological Exposure Indices: | Not Available   |
| 11.8 | Medical Recommendations:     | Treat symptomatically.  |

## 12. ECOLOGICAL INFORMATION

|      |                             |   |
|------|-----------------------------|---|
| 12.1 | Environmental Stability:    | The manufacturer has not reported detailed studies on the environmental fate of the material. However, prudent practice would dictate the material not be allowed to enter the environment. |
| 12.2 | Effect on Plants & Animals: | The manufacturer has not reported any plant and animal effects.   |
| 12.3 | Effect on Aquatic Life:     | The manufacturer has not reported any aquatic life effects.   |



# MATERIAL SAFETY DATA SHEET

Page 4 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 13. DISPOSAL CONSIDERATIONS

|      |                         |  |
|------|-------------------------|--|
| 13.1 | Waste Disposal:         | Dispose of in accordance with regional, federal, state & provincial hazardous waste laws.  |
| 13.2 | Special Considerations: | Refer to manufacturer/supplier for information on recovery/recycling. If the material is unsuitable for recycling or reclamation, enclosed-controlled incineration is recommended unless otherwise prohibited by local ordinance or other statute. |

## 14. TRANSPORTATION INFORMATION

|      |                    |               |  |
|------|--------------------|---------------|--|
| 14.1 | 49 CFR (GND):      | NOT REGULATED |  |
| 14.2 | IATA (AIR):        | NOT REGULATED |  |
| 14.3 | IMDG (OCN):        | NOT REGULATED |  |
| 14.4 | TDGR (Canada GND): | NOT REGULATED |  |
| 14.5 | ADR/RID (EU):      | NOT REGULATED |  |
| 14.6 | MEXICO (SCT):      | NOT REGULATED |  |

## 15. REGULATORY INFORMATION

|      |   |  |  |
|------|---|--|--|
| 15.1 | SARA Reporting Requirements:              | This product does not contain any substances subject to SARA Title III reporting requirements.   |  |
| 15.2 | SARA Threshold Planning Quantity:         | Not applicable   |  |
| 15.3 | TSCA Inventory Status:                    | All components of this product are listed in the TSCA Inventory or are exempt.   |  |
| 15.4 | CERCLA Reportable Quantity (RQ):          | Not Applicable   |  |
| 15.5 | Other Federal Requirements:               | Not Applicable   |  |
| 15.6 | Other Regulations                         | This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List.   |  |
| 15.7 | State Regulatory Information:             | Ingredients in this mixture are not found on any of the following state criteria lists: California OSHA Hazardous Substances List, California Proposition 65, Delaware Air Quality Management List, Florida Toxic Substances List, Massachusetts Hazardous Substances List, Michigan Critical Substances List, Minnesota Hazardous Substances List, New Jersey Right to Know Hazardous Substances List, Pennsylvania Hazardous Substances List, Wisconsin Hazardous Substances List. |  |
| 15.8 | 67/548/EEC (European Union) Requirements: | The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC. Safety Phrases (S): 2-3/9-20/21-45-59 – Keep out of the reach of children. Keep in a cool, well ventilated place. When using, do not eat, drink or smoke. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Refer to manufacturer/supplier for information on recovery/ recycling.  |  |



# MATERIAL SAFETY DATA SHEET



Page 5 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 16. OTHER INFORMATION

|      |   |  |
|------|---|--|
| 16.1 | Other Information:  | Repels dust, soiling & staining. Protects against UV and ozone deterioration. Use on vinyl & leather interiors, vinyl convertible tops, boats seats, clear vinyl & Lexan windows, spa & pool covers, inflatable boats, canoes, kayaks, car bras, tonneau covers, door and trunk seals, tires, fenders flares, bumpers, trim, lenses, motorcycles, bicycles, ATV's, personal watercraft, snow mobiles, wetsuits, diving equipment, latex rubber, plastic furniture. Not for textiles, unfinished leathers or floors.  |
| 16.2 | Terms & Definitions:  | Please see last page of this Material Safety Data Sheet.   |
| 16.3 | Disclaimer:   | This Material Safety Data Sheet complies with U.S. OSHA's Hazard Communication Standard, 29 CFR §1910.1200 and Health Canada's Workplace Hazardous Materials Information System (WHMIS). To the best of ShipMate's or 303 Products' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product. For additional information regarding use, storage and handling or disposal, contact the manufacturer. |
| 16.4 | Prepared for:<br>303 Products, Inc.<br>10801 Starwood Drive<br>Palo Cedro, CA 96073-0966<br>Phone: +1 (530) 549-5617<br>Web: <a href="http://www.303products.com/">http://www.303products.com/</a>  |    |
| 16.5 | Prepared by:<br>ShipMate, Inc.<br>18436 Hawthorne Blvd, Suite 201<br>Torrance, CA 90504<br>Phone: +1 (310) 370-3600<br>Fax: +1 (310) 370-5700<br>E-mail: <a href="mailto:shipmate@shipmate.com">shipmate@shipmate.com</a><br>Web: <a href="http://www.shipmate.com/">http://www.shipmate.com/</a> |    |



# MATERIAL SAFETY DATA SHEET

Page 6 of 6  
303-1002

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

### GENERAL INFORMATION:

|         |                                  |
|---------|----------------------------------|
| CAS No. | Chemical Abstract Service Number |
|---------|----------------------------------|

### EXPOSURE LIMITS IN AIR:

|       |   |
|-------|---|
| ACGIH | American Conference on Governmental Industrial Hygienists |
| TLV   | Threshold Limit Value                                     |
| OSHA  | U.S. Occupational Safety and Health Administration        |
| PEL   | Permissible Exposure Limit                                |
| IDLH  | Immediately Dangerous to Life and Health                  |

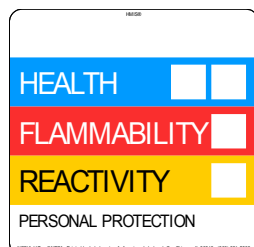
### FIRST AID MEASURES:

|     |  |
|-----|--|
| CPR | Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body. |
|-----|--|

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

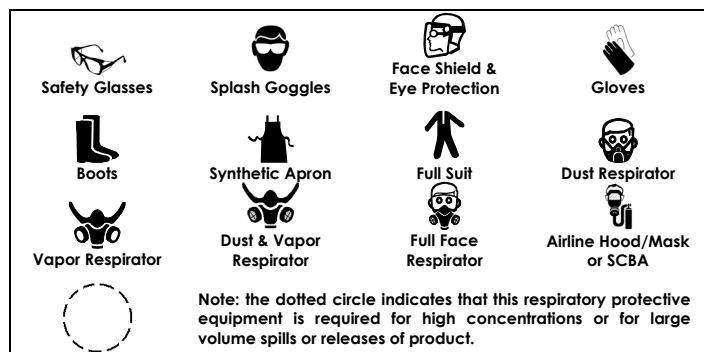
#### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

|   |                 |
|---|-----------------|
| 0 | Minimal Hazard  |
| 1 | Slight Hazard   |
| 2 | Moderate Hazard |
| 3 | Severe Hazard   |
| 4 | Extreme Hazard  |



#### PERSONAL PROTECTION RATINGS:

|   |  |   |  |
|---|--|---|--|
| A |  | G |  |
| B |  | H |  |
| C |  | I |  |
| D |  | J |  |
| E |  | K |  |
| F |  | X | Consult your supervisor or S.O.P. for special handling directions. |



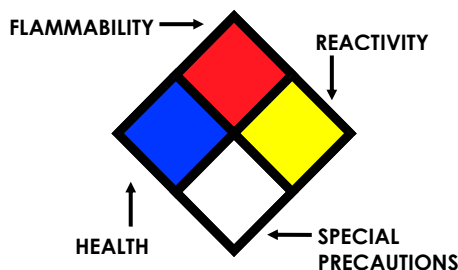
#### OTHER STANDARD ABBREVIATIONS:

|      |                                    |
|------|------------------------------------|
| NA   | Not Available                      |
| NR   | No Results                         |
| NE   | Not Established                    |
| ND   | Not Determined                     |
| ML   | Maximum Limit                      |
| SCBA | Self-Contained Breathing Apparatus |

### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

#### FLAMMABILITY LIMITS IN AIR:

|                          |   |
|--------------------------|---|
| Autoignition Temperature | Minimum temperature required to initiate combustion in air with no other source of ignition   |
| LEL                      | Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source  |
| UEL                      | Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source |



#### HAZARD RATINGS:

|   |                 |
|---|-----------------|
| 0 | Minimal Hazard  |
| 1 | Slight Hazard   |
| 2 | Moderate Hazard |
| 3 | Severe Hazard   |
| 4 | Extreme Hazard  |

|     |              |
|-----|--------------|
| ACD | Acidic       |
| ALK | Alkaline     |
| COR | Corrosive    |
| -W  | Use No Water |
| OX  | Oxidizer     |

#### TOXICOLOGICAL INFORMATION:

|   |   |
|---|---|
| LD <sub>50</sub>  | Lethal Dose (solids & liquids) which kills 50% of the exposed animals |
| LC <sub>50</sub>  | Lethal concentration (gases) which kills 50% of the exposed animal    |
| ppm   | Concentration expressed in parts of material per million parts        |
| TD <sub>10</sub>  | Lowest dose to cause a symptom  |
| TCLo  | Lowest concentration to cause a symptom                               |
| TD <sub>10</sub> , LD <sub>10</sub> , & LD <sub>0</sub> or TC, TC <sub>0</sub> , LC <sub>10</sub> , & LC <sub>0</sub> | Lowest dose (or concentration) to cause lethal or toxic effects       |
| IARC  | International Agency for Research on Cancer                           |
| NTP   | National Toxicology Program   |
| RTECS   | Registry of Toxic Effects of Chemical Substances                      |
| BCF   | Bioconcentration Factor   |
| TL <sub>m</sub>   | Median threshold limit  |
| log K <sub>ow</sub> or log K <sub>oc</sub>  | Coefficient of Oil/Water Distribution                                 |

#### REGULATORY INFORMATION:

|       |  |
|-------|--|
| WHMIS | Canadian Workplace Hazardous Material Information System |
| DOT   | U.S. Department of Transportation                        |
| TC    | Transport Canada   |
| EPA   | U.S. Environmental Protection Agency                     |
| DSL   | Canadian Domestic Substance List                         |
| NDSL  | Canadian Non-Domestic Substance List                     |
| TSCA  | U.S. Toxic Substance Control Act                         |



## Material Safety Data Sheet

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**PRODUCT NAME:** 3M™ Bondo Lightweight Body Filler 261, 261C, 262, 262C, 262ES, 262T, 262W, 265, 265C, 265ES, 265L, 265W, 267, 267C

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 09/22/09

**Supersedes Date:** 05/14/09

**Document Group:** 24-2445-5

### ID Number(s):

60-4550-4828-4, 60-4550-4829-2, 70-0080-0006-2, 70-0080-0007-0, 70-0080-0008-8, 70-0080-0044-3, 70-0080-0045-0, 70-0080-0047-6, 70-0080-0048-4, 70-0080-0052-6, 70-0080-0056-7, 70-0080-0058-3, 70-0080-0059-1

**This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:**

24-2444-8, 24-2136-0

### Revision Changes:

Kit: Component document group number(s) was modified.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Bondo(r) Lightweight Body Filler 260, 261, 261C, 261E, 262, 262C, 262ES, 262L, 262T, 262W, 263, 264, 264S, 265, 265C, 265ES, 265T, 265W, 267, 267C

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 02/08/11

**Supersedes Date:** 01/14/11

**Document Group:** 24-2444-8

**Product Use:**

Intended Use: Automotive

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>   | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|---|-------------------|----------------|
| 1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,5-FURANDIONE AND 2,2'-OXYBIS[ETHANOL]                      | 26123-45-5        | 15 - 40        |
| TALC  | 14807-96-6        | 10 - 30        |
| STYRENE MONOMER   | 100-42-5          | 10 - 30        |
| MAGNESIUM CARBONATE   | 546-93-0          | 7 - 15         |
| SODIUM SILICATE   | 1344-09-8         | 3 - 7          |
| LIMESTONE   | 1317-65-3         | 1 - 5          |
| QUATERNARY AMMONIUM COMPOUNDS, BIS(HYDROGENATED TALLOW ALKYL)DIMETHYL, SALTS WITH MONTMORILLONITE | 68911-87-5        | 1 - 5          |
| CHLORITE (MINERAL)  | 1318-59-8         | 0.1 - 2.0      |
| TITANIUM DIOXIDE  | 13463-67-7        | 0.1 - 1.0      |
| QUARTZ SILICA   | 14808-60-7        | 0.1 - 1.0      |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Paste

**Odor, Color, Grade:** Thick fibrous paste, styrene odor

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause severe eye irritation. May cause severe skin irritation. May cause target organ effects. Contains a chemical or chemicals which can cause cancer.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Skin Contact:**

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

**Inhalation:**

Intentional concentration and inhalation may be harmful or fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Prolonged or repeated exposure may cause:

Immunological Effects: Signs/symptoms may include alterations in the number of circulating immune cells, allergic skin and/or respiratory reaction, and changes in immune function.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Class Description</u>       | <u>Regulation</u>                           |
|-------------------|-------------------|--------------------------------|---|
| QUARTZ SILICA     | 14808-60-7        | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| STYRENE MONOMER   | 100-42-5          | Grp. 2B: Possible human carc.  | International Agency for Research on Cancer |

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

|                                 |   |
|---------------------------------|---|
| <b>Autoignition temperature</b> | <i>No Data Available</i>                          |
| <b>Flash Point</b>              | 80 °F - 82 °F [ <i>Test Method:</i> Closed Cup]   |
| <b>Flash Point</b>              | 26.67 - 27.78 °C [ <i>Test Method:</i> SETAFLASH] |
| <b>Flammable Limits(LEL)</b>    | 0.9 %   |
| <b>Flammable Limits(UEL)</b>    | 6.8 %   |

**OSHA Flammability Classification:**

Class IC Flammable Liquid

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

### 6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Avoid breathing of vapors, mists or spray. Avoid static discharge. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Do not breathe dust. Avoid contact with oxidizing agents.

## 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use in an enclosed process area is recommended. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact. Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

.

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA)

Polymer laminate

.

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Do not breathe dust.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters

. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

### 8.3 EXPOSURE GUIDELINES

| <u><b>Ingredient</b></u> | <u><b>Authority</b></u> | <u><b>Type</b></u>               | <u><b>Limit</b></u> | <u><b>Additional Information</b></u> |
|--------------------------|-------------------------|----------------------------------|---------------------|--------------------------------------|
| LIMESTONE                | OSHA                    | TWA, respirable fraction         | 5 mg/m3             |                                      |
| LIMESTONE                | OSHA                    | TWA, as total dust               | 15 mg/m3            |                                      |
| MAGNESIUM CARBONATE      | OSHA                    | TWA, respirable fraction         | 5 mg/m3             |                                      |
| MAGNESIUM CARBONATE      | OSHA                    | TWA, as total dust               | 15 mg/m3            |                                      |
| QUARTZ SILICA            | ACGIH                   | TWA, respirable fraction         | 0.025 mg/m3         |                                      |
| QUARTZ SILICA            | OSHA                    | TWA concentration, respirable    | 0.1 mg/m3           |                                      |
| QUARTZ SILICA            | OSHA                    | TWA concentration, as total dust | 0.3 mg/m3           |                                      |
| SILICA, AMORPHOUS        | OSHA                    | TWA concentration                | 0.8 mg/m3           |                                      |

|                   |       |      |                                  |
|-------------------|-------|------|----------------------------------|
| SILICA, AMORPHOUS | OSHA  | TWA  | 20 millions of particles/cu. ft. |
| STYRENE MONOMER   | ACGIH | TWA  | 20 ppm                           |
| STYRENE MONOMER   | ACGIH | STEL | 40 ppm                           |
| STYRENE MONOMER   | OSHA  | TWA  | 100 ppm                          |
| STYRENE MONOMER   | OSHA  | CEIL | 200 ppm                          |

**SOURCE OF EXPOSURE LIMIT DATA:**

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Specific Physical Form:</b>            | Paste  |
| <b>Odor, Color, Grade:</b>                | Thick fibrous paste, styrene odor                                |
| <b>General Physical Form:</b>             | Liquid   |
| <b>Autoignition temperature</b>           | <i>No Data Available</i>   |
| <b>Flash Point</b>                        | 80 °F - 82 °F [ <i>Test Method:</i> Closed Cup]                  |
| <b>Flash Point</b>                        | 26.67 - 27.78 °C [ <i>Test Method:</i> SETAFLASH]                |
| <b>Flammable Limits(LEL)</b>              | 0.9 %  |
| <b>Flammable Limits(UEL)</b>              | 6.8 %  |
| <b>Boiling Point</b>                      | 293.00 °F [ <i>Details:</i> CONDITIONS: (Styrene)]               |
| <b>Density</b>                            | 9.5126 lb/gal  |
| <b>Density</b>                            | 1.14 g/ml  |
| <b>Vapor Density</b>                      | <i>No Data Available</i>   |
| <b>Vapor Pressure</b>                     | 5.2 mmHg [ <i>Details:</i> CONDITIONS: at 20 C]                  |
| <b>Specific Gravity</b>                   | 1.14 [ <i>Ref Std:</i> WATER=1]                                  |
| <b>pH</b>                                 | <i>No Data Available</i>   |
| <b>Melting point</b>                      | <i>No Data Available</i>   |
| <b>Solubility in Water</b>                | Nil  |
| <b>Evaporation rate</b>                   | <i>No Data Available</i>   |
| <b>Hazardous Air Pollutants</b>           | 17.8 % weight [ <i>Test Method:</i> Calculated]                  |
| <b>Volatile Organic Compounds</b>         | 203 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]      |
| <b>Volatile Organic Compounds</b>         | 17.8 % weight [ <i>Test Method:</i> calculated per CARB title 2] |
| <b>Kow - Oct/Water partition coef</b>     | <i>No Data Available</i>   |
| <b>Percent volatile</b>                   | 21.03 %  |
| <b>VOC Less H2O &amp; Exempt Solvents</b> | 204 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]      |
| <b>VOC Less H2O &amp; Exempt Solvents</b> | 1.71 lb/gal [ <i>Test Method:</i> calculated SCAQMD rule 443.1]  |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:**

**10.1 Conditions to avoid**

None known

#### 10.2 Materials to avoid

Strong acids  
Strong bases  
Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### Hazardous Decomposition or By-Products

| <u>Substance</u>              | <u>Condition</u>  |
|-------------------------------|-------------------|
| Hydrocarbons                  | Not Specified     |
| Carbon monoxide               | During Combustion |
| Carbon dioxide                | During Combustion |
| Styrene Oxide                 | Not Specified     |
| Toxic Vapor, Gas, Particulate | Not Specified     |

### SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

### SECTION 12: ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION

Not determined.

#### CHEMICAL FATE INFORMATION

Not determined.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

### SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

41-0003-6562-1, 41-3701-1570-5

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

| <u><b>Ingredient</b></u> | <u><b>C.A.S. No</b></u> | <u><b>% by Wt</b></u> |
|--------------------------|-------------------------|-----------------------|
| STYRENE MONOMER          | 100-42-5                | 10 - 30               |

### STATE REGULATIONS

Contact 3M for more information.

### CALIFORNIA PROPOSITION 65

| <u><b>Ingredient</b></u>                                    | <u><b>C.A.S. No.</b></u> | <u><b>Classification</b></u> |
|---|--------------------------|------------------------------|
| SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE) | SEQ677                   | **Carcinogen                 |

\*\* WARNING: contains a chemical which can cause cancer.

### CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Reason for Reissue:** The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

#### Revision Changes:

Section 8: Skin protection - recommended gloves information was modified.

Section 2: Ingredient table was modified.

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## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Bondo Red Cream Hardener 307, 913, 913M, 913C, 913ES, 928, 928C, 9307, 7653079, 810505D, 510506D, 810507D

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 04/13/11

**Supersedes Date:** 04/11/11

**Document Group:** 24-2136-0

#### Product Use:

Intended Use: Automotive

Specific Use: Catalyst for Automotive Body Fillers

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>                                    | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|--|-------------------|----------------|
| BENZOYL PEROXIDE                                     | 94-36-0           | 30 - 60        |
| WATER  | 7732-18-5         | 10 - 30        |
| BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS            | 131298-44-7       | 10 - 20        |
| ZINC STEARATE  | 557-05-1          | 3 - 7          |
| OXIRANE, POLYMER WITH METHYLOXIRANE, MONOBUTYL ETHER | 9038-95-3         | 1 - 5          |
| CALCIUM SULFATE                                      | 7778-18-9         | 1 - 5          |
| IRON OXIDE (FE2O3)                                   | 1309-37-1         | 1 - 5          |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Viscous

**Odor, Color, Grade:** Red paste with slight ester odor

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** Closed containers exposed to heat from fire may build pressure and explode. Dust clouds of this material in combination with an ignition source may be explosive. May cause severe eye irritation. May cause allergic skin reaction.

### **3.2 POTENTIAL HEALTH EFFECTS**

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Skin Contact:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

## **SECTION 4: FIRST AID MEASURES**

### **4.1 FIRST AID PROCEDURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

### **5.1 FLAMMABLE PROPERTIES**

Autoignition temperature  
Flash Point  
Flammable Limits(LEL)  
Flammable Limits(UEL)

No Data Available  
111 °C [Test Method: Estimated]  
Not Applicable  
Not Applicable

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

Water from a safe distance - preferably with a fog nozzle. In case of small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective.

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Closed containers exposed to heat from fire may build pressure and explode. Dust clouds of this material in combination with an ignition source may be explosive. Fire hazard increases when material becomes dry. Part of the oxygen for combustion is supplied by the peroxide itself.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

### 6.2. Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid eye contact with dust or airborne particles.

### 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container tightly closed. Do not heat under confinement to avoid risk of

explosion. Storage at elevated temperatures will shorten shelf life.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polymer laminate

Use an additional glove (e.g. supported PVC or Nitrile) over the PE/EVAL glove, and change the over-glove frequently.

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

### 8.3 EXPOSURE GUIDELINES

| <u><b>Ingredient</b></u> | <u><b>Authority</b></u> | <u><b>Type</b></u>       | <u><b>Limit</b></u> | <u><b>Additional Information</b></u> |
|--------------------------|-------------------------|--------------------------|---------------------|--------------------------------------|
| ZINC STEARATE            | OSHA                    | TWA, respirable fraction | 5 mg/m3             |                                      |
| ZINC STEARATE            | OSHA                    | TWA, as total dust       | 15 mg/m3            |                                      |
| BENZOYL PEROXIDE         | ACGIH                   | TWA                      | 5 mg/m3             |                                      |
| BENZOYL PEROXIDE         | OSHA                    | TWA                      | 5 mg/m3             |                                      |
| CALCIUM SULFATE          | ACGIH                   | TWA, inhalable fraction  | 10 mg/m3            |                                      |
| CALCIUM SULFATE          | OSHA                    | TWA, respirable fraction | 5 mg/m3             |                                      |
| CALCIUM SULFATE          | OSHA                    | TWA, as total dust       | 15 mg/m3            |                                      |
| IRON OXIDE (FE2O3)       | ACGIH                   | TWA, respirable fraction | 5 mg/m3             |                                      |
| IRON OXIDE (FE2O3)       | OSHA                    | TWA, as fume             | 10 mg/m3            |                                      |

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists  
CMRG: Chemical Manufacturer Recommended Guideline  
OSHA: Occupational Safety and Health Administration  
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|   |   |
|---|---|
| Specific Physical Form:                     | Viscous   |
| Odor, Color, Grade:                         | Red paste with slight ester odor                      |
| General Physical Form:                      | Solid   |
| Autoignition temperature                    | No Data Available                                     |
| Flash Point                                 | 111 °C [Test Method: Estimated]                       |
| Flammable Limits(LEL)                       | Not Applicable  |
| Flammable Limits(UEL)                       | Not Applicable  |
| Boiling Point                               | No Data Available                                     |
| Density                                     | 1.2 g/cm <sup>3</sup>                                 |
| Vapor Density                               | Not Applicable  |
| Vapor Pressure                              | Not Applicable  |
| Specific Gravity                            | 1.2 [@ 25 °C] [Ref Std: WATER=1]                      |
| pH  | No Data Available                                     |
| Melting point                               | No Data Available                                     |
| Solubility in Water                         | Negligible  |
| Evaporation rate                            | No Data Available                                     |
| Hazardous Air Pollutants                    | 0 % weight [Test Method: Calculated]                  |
| Volatile Organic Compounds                  | 0 lb/gal [Test Method: calculated SCAQMD rule 443.1]  |
| Volatile Organic Compounds                  | 0 g/l [Test Method: calculated SCAQMD rule 443.1]     |
| Volatile Organic Compounds                  | 0 % weight [Test Method: calculated per CARB title 2] |
| Kow - Oct/Water partition coef              | No Data Available                                     |
| Percent volatile                            | 20 % [Details: Water is the volatile component]       |
| VOC Less H <sub>2</sub> O & Exempt Solvents | 0 g/l [Test Method: calculated SCAQMD rule 443.1]     |
| Viscosity                                   | No Data Available                                     |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable. Stable unless exposed to heat, flames and drying conditions.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Heat

#### 10.2 Materials to avoid

Accelerators

Additional Information: Storage at elevated temperatures will shorten shelf life.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

**Substance**

Carbon monoxide  
Carbon dioxide  
Toxic Vapor, Gas, Particulate

**Condition**

Not Specified  
Not Specified  
Not Specified

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

## SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

LB-K100-0415-4, LB-K100-0415-5, LB-K100-0415-6, LB-K100-0415-7, LB-K100-0540-4, 41-0003-6615-7, 60-4550-4812-8, 60-4550-4999-3, 60-4550-5166-8, 60-4550-5582-6, 60-4550-5584-2, 70-0080-0037-7, 70-0080-0039-3, 70-0080-0147-4, 70-0080-0164-9, 70-0080-0172-2, 70-0080-0173-0, 70-0080-0174-8, 70-0080-0704-2, 70-0080-0705-9, 70-0080-0706-7

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No   Pressure Hazard - No   Reactivity Hazard - Yes   Immediate Hazard - Yes   Delayed Hazard - Yes

**Section 313 Toxic Chemicals** subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| <u>Ingredient</u>              | <u>C.A.S. No</u> | <u>% by Wt</u> |
|--------------------------------|------------------|----------------|
| ZINC STEARATE (ZINC COMPOUNDS) | 557-05-1         | 3 - 7          |
| BENZOYL PEROXIDE               | 94-36-0          | 30 - 60        |

## STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**WHMIS:** Hazardous

|  |
|--|
| This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
|--|

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 1 **Reactivity:** 1 **Special Hazards:** Oxidizer

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health:** 2 **Flammability:** 1 **Reactivity:** 1 **Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

### Revision Changes:

Section 4: First aid for eye contact - decontamination - was modified.

Section 4: First aid for eye contact - medical assistance - was modified.

Section 3: Potential effects from eye contact was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Immediate eye hazard(s) was added.

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**3M USA MSDSs are available at [www.3M.com](http://www.3M.com)**

# SAFETY DATA SHEET



Molub-Alloy 777-1 ES

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier** Molub-Alloy 777-1 ES  
**SDS #** 464073  
**Historic SDS #:** 73361  
**Code** 464073-US17

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** Grease for industrial applications  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Manufacturer** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL  
Product Information: +1-877-641-1600

**Supplier** PAN AMERICAN ENERGY LLC, SUCURSAL  
ARGENTINA AV. LEANDRO N. ALEM 1180  
PISO 11 – C1001AAT  
CIUDAD AUTÓNOMA DE BUENOS AIRES.

**EMERGENCY HEALTH INFORMATION:** Consultas Técnicas 0800-888-8088  
TELÉFONO PARA EMERGENCIAS (24 HORAS) CIQUIME: 0800-222-2933  
+1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

**EMERGENCY TELEPHONE NUMBER**

## SECTION 2: Hazards identification

**Classification of the substance or mixture** SKIN SENSITIZATION - Category 1

### GHS label elements

#### **Hazard pictograms**



**Signal word** Warning  
**Hazard statements** H317 - May cause an allergic skin reaction.

### Precautionary statements

**Prevention** P280 - Wear protective gloves.  
P261 - Avoid breathing vapor.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
**Response** P302 + P352 + P362 + P364 - IF ON SKIN: Wash with plenty of soap and water.  
Take off contaminated clothing and wash it before reuse.  
P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
**Storage** Not applicable.

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 1/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 2: Hazards identification

### Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Other hazards which do not result in classification

Defatting to the skin.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

## SECTION 3: Composition/information on ingredients

### Substance/mixture

Mixture

Highly refined mineral oil and additives. Thickening agent.

### Other means of identification

Not available.

| Ingredient name                              | CAS number                        | %         |
|--|-----------------------------------|-----------|
| Base oil - highly refined                    | Varies - See Key to abbreviations | ≥75 - ≤90 |
| 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione | 72676-55-2                        | <2.5      |
| Molybdenum disulfide                         | 1317-33-5                         | ≤3        |
| (Z)-N-9-octadecenylpropane-1,3-diamine       | 7173-62-8                         | <0.1      |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### Description of necessary first aid measures

#### Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

#### Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention.

#### Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

#### Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects persist or are severe.

#### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### Indication of immediate medical attention and special treatment needed, if necessary

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 2/10

**Date of issue** 11/14/2019.

**Format** Argentina

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**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 4: First aid measures

### Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

### Specific treatments

No specific treatment.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

#### Unsuitable extinguishing media

Do not use water jet.

### Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

#### Hazardous thermal decomposition products

Combustion products may include the following:

metal oxide/oxides

carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)

sulfur oxides (SO, SO<sub>2</sub> etc.)

nitrogen oxides (NO, NO<sub>2</sub> etc.)

### Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

### Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

### Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 3/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 6: Accidental release measures

### Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

## SECTION 7: Handling and storage

### Precautions for safe handling

## Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## SECTION 8: Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name           | Exposure limits  |
|---------------------------|--|
| Base oil - highly refined | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 11/2003 Form: mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 11/2003 Form: mist |
| Molybdenum disulfide      | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina).</b><br>TWA: 3 mg/m <sup>3</sup> , (as Mo) 8 hours. Issued/Revised: 2/2001 Form: respirable fraction  |

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

## SECTION 8: Exposure controls/personal protection

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety glasses with side shields.

#### Skin protection

##### Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

##### Body protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m<sup>3</sup>), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m<sup>3</sup>).

Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being

## SECTION 8: Exposure controls/personal protection

handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## SECTION 9: Physical and chemical properties

### Appearance

|  |   |
|--|---|
| Physical state                               | Grease  |
| Color  | Gray. [Dark]  |
| Odor   | Mild.   |
| Odor threshold                               | Not available.  |
| pH   | Not available.  |
| Melting point                                | Not available.  |
| Boiling point                                | Not available.  |
| Flash point                                  | Open cup: 260°C (500°F) [Cleveland.]                    |
| Evaporation rate                             | Not available.  |
| Flammability (solid, gas)                    | Not applicable. Based on - Physical state               |
| Lower and upper explosive (flammable) limits | Not available.  |
| Vapor pressure                               | Not available.  |
| Vapor density                                | Not available.  |
| Density                                      | <1000 kg/m <sup>3</sup> (<1 g/cm <sup>3</sup> ) at 25°C |
| Solubility                                   | insoluble in water.                                     |
| Partition coefficient: n-octanol/water       | Not available.  |
| Auto-ignition temperature                    | Not available.  |
| Decomposition temperature                    | Not available.  |
| Viscosity                                    | Not available.  |

## SECTION 10: Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.                                   |
| Chemical stability                 | The product is stable.  |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous polymerization will not occur. |
| Conditions to avoid                | No specific data.   |
| Incompatible materials             | Reactive or incompatible with the following materials: oxidizing materials.   |
| Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Specific target organ toxicity (repeated exposure)

| Name                                   | Category   | Route of exposure | Target organs  |
|--|------------|-------------------|----------------|
| (Z)-N-9-octadecenylpropane-1,3-diamine | Category 1 | Not determined    | Not determined |

### Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Skin contact

Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

#### Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

#### Ingestion

No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

No specific data.

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### Inhalation

No specific data.

#### Ingestion

No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

#### Long term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

### Potential chronic health effects

#### General

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

#### Teratogenicity

No known significant effects or critical hazards.

#### Developmental effects

No known significant effects or critical hazards.

#### Fertility effects

No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route          |
|----------------|
| Not available. |

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 7/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 11: Toxicological information

## SECTION 12: Ecological information

### Toxicity

#### Environmental effects

No known significant effects or critical hazards.

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

Not available.

### Mobility in soil

#### Soil/water partition coefficient ( $K_{oc}$ )

Not available.

#### Mobility

Non-volatile. Grease. insoluble in water.

### Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|                            | ADR/RID        | ADN            | IMDG           | IATA/ICAO      |
|----------------------------|----------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              | -              |
| Packing group              | -              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            | No.            |
| Additional information     | -              | -              | -              | -              |

Product name Molub-Alloy 777-1 ES

Product code 464073-US17

Page: 8/10

Date of issue 11/14/2019.

Format Argentina

Language ENGLISH

Version 2.01

(AR)

(ENGLISH)

## SECTION 14: Transport information

**Special precautions for user** Not available.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** Not available.

## SECTION 15: Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Other regulations

**Australia inventory (AICS)** All components are listed or exempted.

**Canada inventory** All components are listed or exempted.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (ENCS)** All components are listed or exempted.

**Korea inventory (KECI)** All components are listed or exempted.

**Philippines inventory (PICCS)** All components are listed or exempted.

**Taiwan Chemical Substances Inventory (TCSI)** All components are listed or exempted.

**United States inventory (TSCA 8b)** All components are active or exempted.

**REACH Status** The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

## SECTION 16: Other information

### History

**Date of issue/Date of revision** 11/14/2019.

**Date of previous issue** 08/28/2019.

**Prepared by** Product Stewardship

**Key to abbreviations**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 9/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 16: Other information

IMDG = International Maritime Dangerous Goods

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

VOC = Volatile Organic Compound

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

Indicates information that has changed from previously issued version.

### Notice to reader

*All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.*

*The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.*

*It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.*

**Section 1. Identification**

**Product name** Tribol GR 4020/220-2 PD  
**SDS #** 468726  
**Code** 468726-US26

**Relevant identified uses of the substance or mixture and uses advised against**

**Product use** Grease for industrial applications.  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Supplier** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL

**EMERGENCY HEALTH INFORMATION:** +1-800-447-8735

**EMERGENCY SPILL INFORMATION:** +1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

**Section 2. Hazards identification**

**OSHA/HCS status** This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** Not classified.

**GHS label elements**

**Signal word** No signal word.

**Hazard statements** No known significant effects or critical hazards.

**Precautionary statements**

**Prevention** Not applicable.

**Response** Not applicable.

**Storage** Not applicable.

**Disposal** Not applicable.

**Hazards not otherwise classified** None known.

**Section 3. Composition/information on ingredients**

**Substance/mixture** Mixture  
Highly refined mineral oil and additives. Thickening agent.

| Ingredient name  | CAS number | %         |
|--|------------|-----------|
| Distillates (petroleum), hydrotreated heavy naphthenic               | 64742-52-5 | ≥25 - ≤50 |
| Residual oils (petroleum), solvent refined                           | 64742-01-4 | ≥25 - ≤50 |
| Distillates (petroleum), solvent-refined heavy paraffinic            | 64741-88-4 | ≤10       |
| Molybdenum, bis(dibutylcarbamodithioato)di-μ-oxodioxodi-, sulfurized | 68412-26-0 | ≤3        |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

|                                   |   |
|-----------------------------------|---|
| <b>Eye contact</b>                | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.             |
| <b>Skin contact</b>               | Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.                   |
| <b>Inhalation</b>                 | If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur. |
| <b>Ingestion</b>                  | Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  |
| <b>Protection of first-aiders</b> | No action shall be taken involving any personal risk or without suitable training.  |

### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### Indication of immediate medical attention and special treatment needed, if necessary

|                            |   |
|----------------------------|---|
| <b>Notes to physician</b>  | Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.<br><br>Note: High Pressure Applications<br>Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. |
| <b>Specific treatments</b> | No specific treatment.  |

## Section 5. Fire-fighting measures

### Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet.   |

|   |                                       |
|---|---------------------------------------|
| <b>Specific hazards arising from the chemical</b> | No specific fire or explosion hazard. |
|---|---------------------------------------|

|                                      |  |
|--------------------------------------|--|
| <b>Hazardous combustion products</b> | Combustion products may include the following:<br>metal oxide/oxides<br>carbon oxides (CO, CO <sub>2</sub> ) (carbon monoxide, carbon dioxide)<br>sulfur oxides (SO, SO <sub>2</sub> etc.)<br>nitrogen oxides (NO, NO <sub>2</sub> etc.) |
|--------------------------------------|--|

|   |   |
|---|---|
| <b>Special protective actions for fire-fighters</b> | No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. |
|---|---|

## Section 5. Fire-fighting measures

### Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

#### Small spill

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

#### Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8).

#### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Distillates (petroleum), hydrotreated heavy naphthenic

#### ACGIH TLV (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

#### OSHA PEL (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 6/1993

Residual oils (petroleum), solvent refined

#### ACGIH TLV (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

#### OSHA PEL (United States).

## Section 8. Exposure controls/personal protection

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
6/1993

Distillates (petroleum), solvent-refined heavy paraffinic

**ACGIH TLV (United States).**

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
11/2009 Form: Inhalable fraction

**OSHA PEL (United States).**

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
6/1993

Molybdenum, bis(dibutylcarbamodithioato)di-μ-oxodioxodi-, sulfurized

**ACGIH TLV (United States).**

TWA: 10 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 2/2001 Form: Inhalable fraction

TWA: 3 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 2/2001 Form: Respirable fraction

**OSHA PEL (United States).**

TWA: 15 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 6/1993 Form: Total dust

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety glasses with side shields.

#### Skin protection

##### Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

##### Body protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

## Section 8. Exposure controls/personal protection

### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.  
For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m<sup>3</sup>), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m<sup>3</sup>).  
Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary.  
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

|   |  |
|---|--|
| Physical state  | Grease   |
| Color   | Amber. [Light]   |
| Odor  | Not available.   |
| Odor threshold  | Not available.   |
| pH  | Not applicable.  |
| Melting point/freezing point                            | Not available.   |
| Boiling point, initial boiling point, and boiling range | Not available.   |
| Flash point   | Open cup: 225°C (437°F) [Cleveland Estimated. Based on Lubricants - Base Oils] |
| Evaporation rate  | Not available.   |
| Flammability  | Not applicable. Based on - Physical state                                      |
| Lower and upper explosion limit/flammability limit      | Not applicable.  |
| Vapor pressure  | Not available.   |
| Relative vapor density                                  | Not applicable.  |
| Density   | <1000 kg/m <sup>3</sup> (<1 g/cm <sup>3</sup> ) at 25°C                        |
| Solubility  | insoluble in water.  |
| Partition coefficient: n-octanol/water                  | Not applicable.  |
| Auto-ignition temperature                               | Not applicable.  |
| Decomposition temperature                               | Not available.   |
| Viscosity   | Kinematic: 220 mm <sup>2</sup> /s (220 cSt) at 40°C                            |
| Particle characteristics                                |  |
| Median particle size                                    | Not available.   |

## Section 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.                                   |
| Chemical stability                 | The product is stable.  |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous polymerization will not occur. |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Conditions to avoid</b>              | Avoid all possible sources of ignition (spark or flame).   |
| <b>Incompatible materials</b>           | Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.       |
| <b>Hazardous decomposition products</b> | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

|   |  |
|---|--|
| <b>Information on the likely routes of exposure</b> | Routes of entry anticipated: Dermal, Inhalation.   |
| <b><u>Potential acute health effects</u></b>        |  |
| <b>Eye contact</b>                                  | No known significant effects or critical hazards.  |
| <b>Skin contact</b>                                 | No known significant effects or critical hazards.  |
| <b>Inhalation</b>                                   | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| <b>Ingestion</b>                                    | No known significant effects or critical hazards.  |

### Symptoms related to the physical, chemical and toxicological characteristics

|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | No specific data.  |
| <b>Skin contact</b> | Adverse symptoms may include the following:<br>irritation<br>dryness<br>cracking |
| <b>Inhalation</b>   | No specific data.  |
| <b>Ingestion</b>    | No specific data.  |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                                    |                |
|------------------------------------|----------------|
| <b>Potential immediate effects</b> | Not available. |
| <b>Potential delayed effects</b>   | Not available. |

#### Long term exposure

|                                    |                |
|------------------------------------|----------------|
| <b>Potential immediate effects</b> | Not available. |
| <b>Potential delayed effects</b>   | Not available. |

#### Potential chronic health effects

|                              |   |
|------------------------------|---|
| <b>General</b>               | No known significant effects or critical hazards. |
| <b>Carcinogenicity</b>       | No known significant effects or critical hazards. |
| <b>Mutagenicity</b>          | No known significant effects or critical hazards. |
| <b>Teratogenicity</b>        | No known significant effects or critical hazards. |
| <b>Developmental effects</b> | No known significant effects or critical hazards. |
| <b>Fertility effects</b>     | No known significant effects or critical hazards. |

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

No testing has been performed by the manufacturer.

### Persistence and degradability

Not expected to be rapidly degradable.

### Bioaccumulative potential

Not available.

### Mobility in soil

#### Soil/water partition coefficient (K<sub>oc</sub>)

Not available.

#### Mobility

Non-volatile. Grease. insoluble in water.

### Other adverse effects

No known significant effects or critical hazards.

## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>DOT Classification</b> | <b>TDG Classification</b> | <b>IMDG</b>    | <b>IATA</b>    |
|-----------------------------------|---------------------------|---------------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.            | Not regulated.            | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                         | -                         | -              | -              |
| <b>Transport hazard class(es)</b> | -                         | -                         | -              | -              |
| <b>Packing group</b>              | -                         | -                         | -              | -              |
| <b>Environmental hazards</b>      | No.                       | No.                       | No.            | No.            |
| <b>Additional information</b>     | -                         | -                         | -              | -              |

### Special precautions for user

Not available.

### Transport in bulk according to IMO instruments

Not available.

## Section 15. Regulatory information

### U.S. Federal regulations

#### United States inventory (TSCA 8b)

All components are active or exempted.

### Other regulations

#### Australia inventory (AIC)

All components are listed or exempted.

#### Canada inventory

All components are listed or exempted.

#### China inventory (IECSC)

All components are listed or exempted.

#### Japan inventory (CSCL)

All components are listed or exempted.

#### Korea inventory (KECI)

All components are listed or exempted.

#### Philippines inventory (PICCS)

All components are listed or exempted.

#### Taiwan Chemical Substances Inventory (TCSI)

All components are listed or exempted.

#### REACH Status

For the REACH status of this product please consult your company contact, as identified in Section 1.

## Section 16. Other information

### History

#### Date of issue/Date of revision

01/04/2022.

#### Date of previous issue

01/04/2022.

#### Prepared by

Product Stewardship

### Key to abbreviations

ACGIH = American Conference of Industrial Hygienists

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS Number = Chemical Abstracts Service Registry Number

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OEL = Occupational Exposure Limit

SDS = Safety Data Sheet

STEL = Short term exposure limit

TWA = Time weighted average

UN = United Nations

UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

### Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.

Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be

## Section 16. Other information

*taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.*



**Chemical Name:** Free Penetrant and Release Agent

**Manufacturer:** Certified

**Container size:** 12oz.

**Location:** VLA

**Disposal:** Place empty container in trash.

# **MATERIAL SAFETY DATA SHEET**

## **SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: FREE

Manufacturer's Product Code: 5068

Other Names: Hydrocarbon based rust loosening aerosol.

Major Recommended Uses: As a rust loosening spray for rusty nuts and bolts and other metal pieces.

Supplier's Details: CERTIFIED LABORATORIES

Address: 114 SIDCO INDUSTRIAL ESTATE  
AMBATTUR, CHENNAI – 600 098

Telephone Number: 44 – 2635 0176 / 7

Fax Number: 44 – 2635 0175

E-mail: nchindia@bsnl.in

Emergency Telephone Number: 44 – 2635 0176 / 7

Date of Issue: September 2007

## **SECTION 2 – HAZARDS IDENTIFICATION**

Hazard Classification: NOT classified as hazardous according to the criteria of NOHSC.

Dangerous Goods Class & Sub-risk: Class 2.1, no sub-risk.

Poisons Schedule: None allocated.

Risk Phrases: Flammable.  
Repeated exposure may cause skin dryness or cracking.  
Vapours may cause drowsiness and dizziness.

Safety Phrases: Keep out of reach of children  
Keep away from sources of ignition - no smoking.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## **SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS**

### **Ingredients**

| Chemical Entity                              | CAS No | Proportion | Synonyms |
|--|--------|------------|----------|
| 'INGREDIENTS DETERMINED NOT TO BE HAZARDOUS' |        | 100%       |          |

## **SECTION 4 – FIRST AID MEASURES**

Skin: Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops.

Eye: Rinse eyes with water for 15-minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion: Give 3-4 glasses of water, but do NOT induce vomiting. If vomiting occurs, give fluids again. Seek medical attention if discomfort occurs.

First Aid Facilities: General eyewash.

Advice to Doctor: There is no specific antidote. Treat the patient symptomatically.

Additional Information: Gastric lavage is indicated. Do not induce vomiting. Chronic poisoning has produced secondary anaemia, leucocytosis and a cloudy swelling and fatty degradation of the viscera. Primary routes of entry are via inhalation and absorption.

## **SECTION 5 – FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: In the event of a fire, powder, foam, CO<sub>2</sub> and water spray are the recommended extinguishing agents.

Special Protective Equipment and Precautions for Fire Fighters: Fire fighters should wear self-contained breathing apparatus and full protective gear.

Fire/Explosive Hazards: Vapours are heavier than air and may travel to distant and/or low-lying sources of ignition and flashback. Product may produce a floating fire hazard as liquid floats on water.

Hazchem Code: 2Y

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

Wear appropriate protective clothing.

Methods and Materials for Containment and Clean Up: Due to the nature of aerosol packaging, a large spill is unlikely. For a small spill, ventilate the area and absorb with an inert material. Dispose of waste in a closed, labelled container in accordance with local, state and Commonwealth laws. Typical disposal is to wrap the empty aerosol container in several layers of newspaper and dispose of in the garbage. Do not puncture or incinerate the can.

## **SECTION 7 – HANDLING AND STORAGE**

Precautions for Safe Handling: Observe precautions stated on product label, and follow industry safety regulations. Eating and smoking should be prohibited where the preparation is used. Use with caution around heat, sparks, pilot lights, static electricity and open flame.

Conditions for Safe Storage: Store indoors in the in original container. Store in a dry, well-ventilated area. Store below 49°C.

## **SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Standards: Not established for this mixture. The exposure limits for individual components follow:

|                            |  |
|----------------------------|--|
| Ethyl acetate:             | TWA - 200ppm; 720mg/m <sup>3</sup> ;STEL - 400ppm; 1440mg/m <sup>3</sup> |
| Propane/butane propellant: | TLV TWA – 800ppm; 1900mg/m <sup>3</sup>                                  |

Engineering Controls: General exhaust is usually adequate, although local ventilation is recommended to control exposure from operations that can generate mists or vapours. Minimise use in confined spaces.

Personal Protective Equipment:

Eye/Face Protection: Wear safety glasses or solvent resistant mask if the method of use presents the likelihood of eye contact. AS1336 and AS/NZS1337 should be consulted for information on eye protection.

Skin Protection: Neoprene or nitrile rubber gloves should be worn if repeated or prolonged skin contact is likely.

Respiratory Protection: None required under normal conditions of use. If misting is likely to occur, or if used in confined or poorly ventilated areas where exposure will be above the TLV, an approved

organic vapour respirator meeting the requirements outlined in AS/NZS 1715 and AS/NZS 1716 should be used.

## **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

|                            |   |
|----------------------------|---|
| Appearance:                | Clear to amber liquid with a vinegar odour. |
| pH:                        | Not applicable                              |
| Vapour Pressure:           | Not available                               |
| Boiling Point:             | 72°C  |
| Melting Point:             | Not applicable                              |
| Solubility in Water (g/L): | Insoluble                                   |
| Specific Gravity:          | 0.87 (At 25 °C ; water = 1)                 |
| Flashpoint:                | 27°C  |
| Flashpoint Method:         | TAG Closed Cup                              |
| Flammability Limits:       | LEL: 2.2; UEL: 11.0                         |
| % Volatiles by Volume:     | 50.0%                                       |
| Evaporation Rate:          | 1.0 (BU A/C = 1)                            |

## **SECTION 10 – STABILITY AND REACTIVITY**

Stability: Stable.

Hazardous Polymerisation: Will not occur.

Conditions/Materials to Avoid: Avoid heat, hot surfaces, sparks, and open flames.

Keep away from strong oxidising agents such as chlorine bleach, concentrated hydrogen peroxide, dichromates, permanganates, and potassium hypochlorite; acids, bases, silica gel, potassium t-butoxide, oleum, nitrates, lithium tetrahydroaluminate, lithium aluminium hydride, chromium trioxide, chlorosulfonic acid, 2-chloromethylfuran, amines, and alumina.

Hazardous Decomposition Products: Oxides of carbon – carbon monoxide under extreme heat; oxides of nitrogen, sodium, and sulphur; aldehydes.

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

Health Effects:

Acute - Swallowed: May cause irritation with possible nausea, cramps, vomiting and diarrhoea.

Acute - Eye: May cause irritation seen as tearing, redness, and a burning sensation. Blurred vision may result.

Acute - Skin: May cause irritation seen as itching and redness.

Acute - Inhaled: May cause respiratory irritation seen as coughing and sneezing. Inhalation of large amounts may cause dizziness, headache and other central nervous system effects.

Chronic: Due to the use pattern of this product, the likelihood of any chronic effects occurring is remote. Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis; pre-existing blood, cardiovascular, liver, and kidney diseases. May cause corneal clouding, dermatitis or even a narcotic effect and also congestion in the liver and kidneys.

Target Organs: Central nervous system, lungs, kidneys and liver.

## **SECTION 12 – ECOLOGICAL INFORMATION**

No specific toxicology data on this product is available. When used as indicated, no adverse environmental effects are foreseen. Avoid contaminating waterways.

Persistence/Degradability: Not readily biodegradable; slowly biodegradable in aerobic conditions.

Mobility in Soil: Not soluble in water.

### **SECTION 13 – DISPOSAL CONSIDERATIONS**

Do not incinerate or puncture aerosol cans. If aerosol can develops a leak, allow to fully discharge before disposal. Prevent disposal in sewers and waterways. Normally suitable for disposal at approved land waste site, but review Commonwealth, State and local government requirements prior to disposal.

### **SECTION 14 – TRANSPORT INFORMATION**

|                                 |                             |
|---------------------------------|-----------------------------|
| <u>UN Number:</u>               | UN1950                      |
| <u>UN Proper Shipping Name:</u> | Aerosol                     |
| <u>Transport Hazard Class:</u>  | ADG Class 2.1, no sub-risk. |
| <u>Packaging Group:</u>         | Not applicable.             |
| <u>Hazchem Code:</u>            | 2Y                          |

### **SECTION 15 - REGULATORY INFORMATION**

Poisons Schedule: None allocated ;

### **SECTION 16 – OTHER INFORMATION**

1<sup>st</sup> update of 16-heading MSDS – added DG pictogram to Section 15.

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. CERTIFIED assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.



## Safety Data Sheet

**24 Hour Emergency Phone Numbers**  
**Medical/Poison Control:**  
 In U.S.: Call 1-800-222-1222

**Outside U.S.: Call your local poison control center**

**Transportation/National Response Center:**

**1-800-535-5053**  
**1-352-323-3500**

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

### 1. Identification

|                            |   |                           |                                      |
|----------------------------|---|---------------------------|--------------------------------------|
| <b>Product Name:</b>       | Original Contact Cement Gel   | <b>Revision Date:</b>     | 1/31/2020                            |
| <b>Product UPC Number:</b> | 070798253124, 070798253162  | <b>Supersedes Date:</b>   | 6/19/2015                            |
| <b>Manufacturer:</b>       | DAP Products Inc.<br>2400 Boston Street Suite 200<br>Baltimore, MD 21224-4723<br>888-327-8477 (non - emergency matters) | <b>Product Use/Class:</b> | Adhesive                             |
|                            | SDS Coordinator: MSDS@dap.com   | <b>SDS No:</b>            | 00030536001                          |
|                            | Emergency Telephone:<br>Transportation: 1-800-535 -5053<br>1-352-323-3500<br>Poison Control: 1-800-222-1222             | <b>Preparer:</b>          | Regulatory and Environmental Affairs |

### 2. Hazards Identification

#### GHS Classification

Acute Tox. 4 Inhalation, Carc. 1B, Eye Irrit. 2, Flam. Liq. 1, Muta. 1B, Skin Irrit. 2, STOT RE 2, STOT SE 3 NE, STOT SE 3 RTI

#### Symbol(s) of Product



#### Signal Word

Danger

#### Possible Hazards

4% of the mixture consists of ingredients of unknown acute toxicity

#### GHS HAZARD STATEMENTS

Flammable Liquid, category 1

H224

Extremely flammable liquid and vapour.

|  |      |  |
|--|------|--|
| Skin Irritation, category 2            | H315 | Causes skin irritation.  |
| Eye Irritation, category 2             | H319 | Causes serious eye irritation.                                     |
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled.  |
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation.                                  |
| STOT, single exposure, category 3, NE  | H336 | May cause drowsiness or dizziness.                                 |
| Germ Cell Mutagenicity, category 1B    | H340 | May cause genetic defects .  |
| Carcinogenicity, category 1B           | H350 | May cause cancer.  |
| STOT, repeated exposure, category 2    | H373 | May cause damage to organs through prolonged or repeated exposure. |

**GHS LABEL PRECAUTIONARY STATEMENTS**

|                |  |
|----------------|--|
| P102           | Keep out of reach of children.   |
| P201           | Obtain special instructions before use.  |
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P260           | Do not breathe dust/fume/gas/mist/vapours/spray.   |
| P262           | Do not get in eyes, on skin, or on clothing.   |
| P264           | Wash thoroughly after handling.  |
| P271           | Use only outdoors or in a well-ventilated area.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.                              |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313      | IF exposed or concerned: Get medical advice/attention.   |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P321           | Specific treatment (see ... on this label).  |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P362           | Take off contaminated clothing.  |
| P370+P378      | In case of fire: Use... to extinguish.   |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.   |
| P403+P235      | Store in a well-ventilated place. Keep cool.   |
| P405           | Store locked up.   |
| P501           | Dispose of contents/container to ...   |

**GHS SDS PRECAUTIONARY STATEMENTS**

|      |   |
|------|---|
| P240 | Ground/bond container and receiving equipment.                      |
| P241 | Use explosion-proof electrical/ventilating/lighting/.../ equipment. |
| P242 | Use only non-sparking tools.  |
| P243 | Take precautionary measures against static discharge.               |

**3. Composition/Information on Ingredients**

| <u>Chemical Name</u>   | <u>CAS-No.</u> | <u>Wt. %</u> | <u>GHS Symbols</u> | <u>GHS Statements</u>        |
|--|----------------|--------------|--------------------|------------------------------|
| Toluene  | 108-88-3       | 30-60        | GHS02-GHS07-GHS08  | H225-304-315-332-335-336-373 |
| Distillates (petroleum), light distillate hydrotreating process, low-boiling | 68410-97-9     | 10-30        | GHS06-GHS07-GHS08  | H304-312-315-331-336-340-350 |
| Methyl ethyl ketone (MEK)  | 78-93-3        | 7-13         | GHS02-GHS07        | H225-319-332-336             |
| Petroleum hydrocarbon resin  | 64742-16-1     | 1-5          | No Information     | No Information               |
| Hydrogenated castor oil  | 8001-78-3      | 0.5-1.5      | GHS06              | H312-330                     |
| Magnesium oxide  | 1309-48-4      | 0.5-1.5      | No Information     | No Information               |

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

**4. First-aid Measures**

**FIRST AID - INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. NOTE: Only trained personnel should administer artificial respiration or give oxygen.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The

use of vegetable oil or mineral oil is recommended for removal of this material from the skin. Flush exposed area with water while removing contaminated clothing. Get medical attention if irritation persists. To remove from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water.

**FIRST AID - EYE CONTACT:** If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

**FIRST AID - INGESTION:** If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

## 5. Fire-fighting Measures

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors may form explosive mixtures with air. Containers may explode if exposed to extreme heat. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces. Cool fire-exposed containers using water spray.

**EXTINGUISHING MEDIA:** Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Spray or Fog, Water

## 6. Accidental Release Measures

**ENVIRONMENTAL MEASURES:** No Information

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Scrape up dried material and place into containers.

## 7. Handling and Storage

**HANDLING:** KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Remove all sources of ignition. Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Avoid heat, sparks and open flames. Wear appropriate personal protection. Avoid breathing vapor and contact with eyes, skin and clothing. Use in well ventilated area. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion. Wash thoroughly after handling. Do not use in areas where static sparks may be generated. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Construction and repair activities can adversely affect indoor air quality. Consult with occupants or a representative (i.e. maintenance, building manager, industrial hygienist, or safety officer) to determine ways to minimize impact.

**STORAGE:** Store away from sources of ignition and heat. Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Keep containers tightly closed.

## 8. Exposure Controls/Personal Protection

### Ingredients with Occupational Exposure Limits

| <u>Chemical Name</u>   | <u>ACGIH TLV-TWA</u>         | <u>ACGIH-TLV STEL</u> | <u>OSHA PEL-TWA</u>                    | <u>OSHA PEL-CEILING</u> |
|--|------------------------------|-----------------------|--|-------------------------|
| Toluene  | 20 ppm TWA                   | N.E.                  | 200 ppm TWA                            | 300 ppm Ceiling         |
| Distillates (petroleum), light distillate hydrotreating process, low-boiling | N.E.                         | N.E.                  | N.E.                                   | N.E.                    |
| Methyl ethyl ketone (MEK)  | 200 ppm TWA                  | 300 ppm STEL          | 200 ppm TWA, 590 mg/m <sup>3</sup> TWA | N.E.                    |
| Petroleum hydrocarbon resin  | N.E.                         | N.E.                  | N.E.                                   | N.E.                    |
| Hydrogenated castor oil  | N.E.                         | N.E.                  | N.E.                                   | N.E.                    |
| Magnesium oxide  | 10 mg/m <sup>3</sup> TWA     | N.E.                  | 15 mg/m <sup>3</sup> TWA               | N.E.                    |
|  | inhalable particulate matter |                       | fume, total particulate                |                         |

**Further Advice:** MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation  
Sk = Skin Sensitizer N.E. = Not Established

**Personal Protection**

**RESPIRATORY PROTECTION:** A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear and appropriate, properly fitted respirator (NIOSH approved) during and after application. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



**SKIN PROTECTION:** Solvent-resistant gloves.



**EYE PROTECTION:** Goggles or safety glasses with side shields.



**OTHER PROTECTIVE EQUIPMENT:** Provide eyewash and solvent impervious apron if body contact may occur.



**HYGIENIC PRACTICES:** Remove and wash contaminated clothing before re-use.

## 9. Physical and Chemical Properties

|                                       |                             |   |                           |
|---------------------------------------|-----------------------------|---|---------------------------|
| <b>Appearance:</b>                    | Tan                         | <b>Physical State:</b>                    | Thick Liquid              |
| <b>Odor:</b>                          | Strong Solvent              | <b>Odor Threshold:</b>                    | Not Established           |
| <b>Density, g/cm3:</b>                | 0.88 - 0.88                 | <b>pH:</b>                                | Not Applicable            |
| <b>Freeze Point, °C:</b>              | Not Established             | <b>Viscosity (mPa.s):</b>                 | Not Established           |
| <b>Solubility in Water:</b>           | No Information              | <b>Partition Coeff., n-octanol/water:</b> | Not Established           |
| <b>Decomposition Temperature, °C:</b> | Not Established             | <b>Explosive Limits, %:</b>               | N.E. - N.E.               |
| <b>Boiling Range, °C:</b>             | N.E. - N.E.                 | <b>Auto-Ignition Temperature, °C</b>      | Not Established           |
| <b>Minimum Flash Point, °C:</b>       | -6.1                        | <b>Vapor Pressure, mmHg:</b>              | Not Established           |
| <b>Evaporation Rate:</b>              | Not Established             | <b>Flash Method:</b>                      | Pensky-Martens Closed Cup |
| <b>Vapor Density:</b>                 | Not Established             | <b>Flammability, NFPA:</b>                | Flammable Liquid Class IA |
| <b>Combustible Dust:</b>              | Does not support combustion |   |                           |

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

## 10. Stability and Reactivity

**STABILITY:** Stable under recommended storage conditions.

**CONDITIONS TO AVOID:** Keep away from open flames, hot surfaces and sources of ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Avoid contact with skin, eyes and clothing. Do not smoke.

**INCOMPATIBILITY:** Open flames, hot surfaces and sources of ignition. Keep away from strong oxidizing agents, heat and open flames. Exothermic reaction with strong acids. Strong oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Normal decomposition products, i.e., COx, NOx.

## 11. Toxicological Information

**EFFECT OF OVEREXPOSURE - INHALATION:** Inhalation of vapors may cause irritation of the nose, throat, lungs and respiratory tract. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss

of consciousness.

**EFFECT OF OVEREXPOSURE - SKIN CONTACT:** Harmful if absorbed through the skin. May cause skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

**EFFECT OF OVEREXPOSURE - EYE CONTACT:** May cause eye irritation. Signs and symptoms may include: pain, tears, swelling, redness and blurred vision.

**EFFECT OF OVEREXPOSURE - INGESTION:** Harmful or fatal if swallowed. May cause gastrointestinal disturbances with dizziness and central nervous system depression. If ingested, may cause depressed respiration. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal.

**CARCINOGENICITY:** No Information

**EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS:** Repeated or prolonged exposure may cause skin, respiratory, kidney and liver damage. May cause kidney and liver damage as well as developmental and reproductive toxicity. Prolonged or repeated inhalation of solvent vapors may cause irregular heartbeat. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Overexposure or misuse of toluene can cause liver, kidney, and brain damage as well as cardiac abnormalities. There have been cases of aplastic anemia from toluene in industrial exposures (ACGIH, 1992). Increased coagulation time and reduced clotting factors have also been found, which are indicators of damage to the bone marrow (Clayton & Clayton, 1994). Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

**PRIMARY ROUTE(S) OF ENTRY:** Skin Contact, Skin Absorption, Inhalation

#### Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

| <u>CAS-No.</u> | <u>Chemical Name</u>   | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|--|------------------|--------------------|-------------------|
| 108-88-3       | Toluene  | 2600 mg/kg Rat   | 12000 mg/kg Rabbit | 12.5 mg/L Rat     |
| 68410-97-9     | Distillates (petroleum), light distillate hydrotreating process, low-boiling | 5170 mg/kg Rat   | 1900 mg/kg Rabbit  | >4.96 mg/L Rat    |
| 78-93-3        | Methyl ethyl ketone (MEK)  | 2483 mg/kg Rat   | 5000 mg/kg Rabbit  | 34.5 mg/l Rat     |
| 64742-16-1     | Petroleum hydrocarbon resin  | N.I.             | N.I.               | N.I.              |
| 8001-78-3      | Hydrogenated castor oil  | >10000 mg/kg Rat | 2000 mg/kg Rat     | > 1.86 mg/L Rat   |
| 1309-48-4      | Magnesium oxide  | >3870 mg/kg Rat  | N.I.               | N.I.              |

N.I. = No Information

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Ecological injuries are not known or expected under normal use.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Residues and spilled material are hazardous waste due to ignitability. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Liquids cannot be disposed of in a landfill. Do not flush into surface water or sanitary sewer system. Do not empty into drains. Do not re-use empty containers. The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container.

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Scrape up dried material and place into containers.

## 14. Transport Information

**DOT UN/NA Number:** UN1133  
**DOT Proper Shipping Name:** Adhesives, containing a flammable liquid  
**DOT Technical Name:** N.A.  
**DOT Hazard Class:** 3 Flammable liquid  
**Hazard SubClass:** N.A.  
**Packing Group:** No Information

## 15. Regulatory Information

### SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

### TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

## 16. Other Information

**Revision Date:** 1/31/2020 **Supersedes Date:** 6/19/2015

**Reason for revision:**

- Revision Description Changed
- Product Composition Changed
- Substance and/or Product Properties Changed in Section(s):
  - 01 - Product Information
  - 02 - Hazards Identification
  - 05 - Flammability Information
  - 08 - Exposure Controls/Personal Protection
  - 09 - Physical & Chemical Information
  - 11 - Toxicological Information
  - 13 - Disposal Information
  - 14 - Transportation Information
  - 15 - Regulatory Information
  - 16 - Other Information
- Substance Chemical Name Changed
- Substance Regulatory CAS Number Changed
- Substance Hazardous Flag Changed
- Substance Hazard Threshold % Changed
- Revision Statement(s) Changed

**Datasheet produced by:** Regulatory Department

### HMIS Ratings:

| Health: | Flammability: | Reactivity: | Personal Protection: |
|---------|---------------|-------------|----------------------|
| 3*      | 4             | 1           | X                    |

VOC Less Water Less Exempt Solvent, g/L: 702.8

VOC Material, g/L: 702

VOC as Defined by California Consumer Product Regulation, Wt/Wt%: 65.92

VOC Actual, Wt/Wt%: 79.5

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

|      |   |
|------|---|
| H225 | Highly flammable liquid and vapour.           |
| H304 | May be fatal if swallowed and enters airways. |

|      |  |
|------|--|
| H312 | Harmful in contact with skin.                                      |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.                                     |
| H330 | Fatal if inhaled.  |
| H331 | Toxic if inhaled.  |
| H332 | Harmful if inhaled.  |
| H335 | May cause respiratory irritation.                                  |
| H336 | May cause drowsiness or dizziness.                                 |
| H340 | May cause genetic defects.   |
| H350 | May cause cancer.  |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**Icons for GHS Pictograms shown in Section 3 describing each ingredient:**

GHS02



GHS06



GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

## SECTION 1. IDENTIFICATION

Product name : DOW CORNING(R) 3140 RTV COATING

Product code : 000000000001015788

**Manufacturer or supplier's details**

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road  
Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900  
CHEMTREC : (800) 424-9300**Recommended use of the chemical and restrictions on use**Recommended use : Adhesive, binding agents  
Electrical industry and electronics

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Reproductive toxicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H361f Suspected of damaging fertility.

Precautionary Statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.**Response:**

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Storage:**

P405 Store locked up.

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
Date of first issue: 02/10/2015

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture  
Chemical nature : Silicone elastomer

**Hazardous ingredients**

| Chemical name                             | CAS-No.    | Concentration (% w/w) |
|---|------------|-----------------------|
| Hexamethyldisilazane reaction with Silica | 68909-20-6 | $\geq 10$ - $< 20$    |
| Methyltrimethoxysilane                    | 1185-55-3  | $\geq 1$ - $< 5$      |
| Octamethylcyclotetrasiloxane              | 556-67-2   | $\geq 0.1$ - $< 1$    |
| Methanol                                  | 67-56-1    | $\geq 0.1$ - $< 1$    |

**SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.  
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : Suspected of damaging fertility.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

**DOW CORNING(R) 3140 RTV COATING**

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Notes to physician : Treat symptomatically and supportively.

**SECTION 5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides  
Silicon oxides  
Formaldehyde  
Nitrogen oxides (NO<sub>x</sub>)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**SECTION 7. HANDLING AND STORAGE**

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Avoid inhalation of vapor or mist.  
Do not swallow.  
Avoid contact with eyes.  
Avoid prolonged or repeated contact with skin.  
Handle in accordance with good industrial hygiene and safety practice.  
Keep away from water.  
Protect from moisture.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.  
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

| Ingredients                               | CAS-No.    | Value type<br>(Form of exposure) | Control parameters / Permissible concentration    | Basis     |
|---|------------|----------------------------------|---|-----------|
| Hexamethyldisilazane reaction with Silica | 68909-20-6 | TWA (Dust)                       | 20 Million particles per cubic foot (Silica)      | OSHA Z-3  |
|   |            | TWA (Dust)                       | 80 mg/m <sup>3</sup> / %SiO <sub>2</sub> (Silica) | OSHA Z-3  |
| Methyltrimethoxysilane                    | 1185-55-3  | TWA                              | 7.5 ppm   | DCC OEL   |
| Octamethylcyclotetrasiloxane              | 556-67-2   | TWA                              | 10 ppm  | DCC OEL   |
|   |            | TWA                              | 10 ppm  | US WEEL   |
| Methanol                                  | 67-56-1    | TWA                              | 200 ppm   | ACGIH     |
|   |            | STEL                             | 250 ppm   | ACGIH     |
|   |            | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>                  | NIOSH REL |
|   |            | ST                               | 250 ppm<br>325 mg/m <sup>3</sup>                  | NIOSH REL |
|   |            | TWA                              | 200 ppm   | OSHA Z-1  |

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
 Date of first issue: 02/10/2015

|  |  |  |                       |  |
|--|--|--|-----------------------|--|
|  |  |  | 260 mg/m <sup>3</sup> |  |
|--|--|--|-----------------------|--|

**Occupational exposure limits of decomposition products**

| Ingredients | CAS-No. | Value type<br>(Form of exposure) | Control parameters / Permissible concentration | Basis     |
|-------------|---------|----------------------------------|--|-----------|
| Methanol    | 67-56-1 | TWA                              | 200 ppm  | ACGIH     |
|             |         | STEL                             | 250 ppm  | ACGIH     |
|             |         | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>               | NIOSH REL |
|             |         | ST                               | 250 ppm<br>325 mg/m <sup>3</sup>               | NIOSH REL |
|             |         | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>               | OSHA Z-1  |

**Biological occupational exposure limits**

| Ingredients | CAS-No. | Control parameters | Biological specimen | Sampling time  | Permissible concentration | Basis     |
|-------------|---------|--------------------|---------------------|--|---------------------------|-----------|
| Methanol    | 67-56-1 | Methanol           | Urine               | End of shift (As soon as possible after exposure ceases) | 15 mg/l                   | ACGIH BEI |

**Engineering measures** : Processing may form hazardous compounds (see section 10).  
 Ensure adequate ventilation, especially in confined areas.  
 Minimize workplace exposure concentrations.

**Personal protective equipment**

**Respiratory protection** : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Hand protection**  
**Material**

: Chemical-resistant gloves

**Remarks**

: For prolonged or repeated contact use protective gloves. Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

- Eye protection : Wear the following personal protective equipment:  
Safety glasses
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.  
These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.  
For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry ([www.SEHSC.com](http://www.SEHSC.com)) or contact the Dow Corning customer service group.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : white, translucent
- Odor : slight
- Odor Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : > 65 °C
- Flash point : > 101.1 °C  
Method: closed cup
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Upper explosion limit : No data available
- Lower explosion limit : No data available

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

|  |   |  |
|--|---|--|
| Vapor pressure                         | : | No data available  |
| Relative vapor density                 | : | No data available  |
| Relative density                       | : | 1.05   |
| Solubility(ies)                        |   |  |
| Water solubility                       | : | No data available  |
| Partition coefficient: n-octanol/water | : | No data available  |
| Autoignition temperature               | : | No data available  |
| Decomposition temperature              | : | No data available  |
| Viscosity                              |   |  |
| Viscosity, dynamic                     | : | 300 Poise  |
| Explosive properties                   | : | Not explosive  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing. |
| Molecular weight                       | : | No data available  |

**SECTION 10. STABILITY AND REACTIVITY**

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard.   |
| Chemical stability                 | : | Stable under normal conditions.  |
| Possibility of hazardous reactions | : | Use at elevated temperatures may form highly hazardous compounds.<br>Can react with strong oxidizing agents.<br>When heated to temperatures above 180 °C (356 °F) in the presence of air, trace quantities of formaldehyde may be released.<br>Adequate ventilation is required.<br>See OSHA formaldehyde standard, 29 CFR 1910.1048<br>Hazardous decomposition products will be formed upon contact with water or humid air.<br>Hazardous decomposition products will be formed at elevated temperatures. |
| Conditions to avoid                | : | Exposure to moisture.  |
| Incompatible materials             | : | Oxidizing agents<br>Water  |

**Hazardous decomposition products**

|                                 |   |          |
|---------------------------------|---|----------|
| Contact with water or humid air | : | Methanol |
|---------------------------------|---|----------|

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Thermal decomposition : Formaldehyde

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Acute oral toxicity : LD50 (Rat): 12.3 ml/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Information taken from reference works and the literature.

Acute inhalation toxicity : LC50 (Rat): > 42.1 mg/l  
Exposure time: 6 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on test data

Acute dermal toxicity : LD50 (Rabbit): > 9,500 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on test data

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

**Octamethylcyclotetrasiloxane:**

- Acute oral toxicity : LD50 (Rat): > 4,800 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on test data
- Acute inhalation toxicity : LC50 (Rat): 2975 ppm  
Exposure time: 4 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on test data
- Acute dermal toxicity : LD50 (Rabbit): > 2.5 ml/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on test data

**Methanol:**

- Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment
- Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Expert judgment  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI
- Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment

**Skin corrosion/irritation**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Assessment: Repeated exposure may cause skin dryness or cracking.

**Methyltrimethoxysilane:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on test data

**Methanol:**

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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Species: Rabbit  
Result: No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on test data

**Methanol:**

Species: Rabbit  
Result: No eye irritation

**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Product:**

Assessment: Does not cause skin sensitization.

Test Type: Buehler Test  
Species: Guinea pig  
Remarks: Based on data from similar materials

**Ingredients:****Methyltrimethoxysilane:**

Assessment: Probability or evidence of low to moderate skin sensitization rate in humans

Test Type: Buehler Test  
Species: Guinea pig  
Remarks: Based on test data

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

**Octamethylcyclotetrasiloxane:**

Assessment: Does not cause skin sensitization.

Test Type: Maximization Test  
Species: Guinea pig  
Remarks: Based on test data

**Methanol:**

Test Type: Maximization Test  
Routes of exposure: Skin contact  
Species: Guinea pig  
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)  
Result: positive  
Remarks: Based on test data

: Test Type: Chromosome aberration test in vitro  
Result: positive  
Remarks: Based on test data

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Ingestion  
Result: negative  
Remarks: Based on test data

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Octamethylcyclotetrasiloxane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Result: negative  
Remarks: Based on test data

: Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Based on test data

: Test Type: In vitro sister chromatid exchange assay in mammalian cells  
Result: negative  
Remarks: Based on test data

: Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)  
Result: negative  
Remarks: Based on test data

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on test data

Test Type: Rodent dominant lethal test (germ cell) (in vivo)  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on test data

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Methanol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Ingredients:****Methanol:**

Species: Mouse

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Application Route: inhalation (vapor)  
Exposure time: 18 Months  
Result: negative

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Suspected of damaging fertility.

**Ingredients:****Methyltrimethoxysilane:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat, male and female  
Application Route: Ingestion  
Symptoms: No effects on fertility.  
Remarks: Based on test data

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat, male and female  
Application Route: Ingestion  
Symptoms: No effects on fetal development.  
Remarks: Based on test data

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

**Octamethylcyclotetrasiloxane:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat, male and female  
Application Route: inhalation (vapor)  
Symptoms: Effects on fertility.  
Remarks: Based on test data

Effects on fetal development : Test Type: Prenatal development toxicity study (teratogenicity)  
Species: Rabbit  
Application Route: inhalation (vapor)  
Symptoms: No effects on fetal development.  
Remarks: Based on test data

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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**Methanol:**

Effects on fertility : Test Type: Fertility/early embryonic development  
Species: Mouse  
Application Route: Ingestion  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Mouse  
Application Route: Ingestion  
Result: positive  
Remarks: The effects were seen only at maternally toxic doses.

**STOT-single exposure**

Not classified based on available information.

**Ingredients:****Methanol:**

Target Organs: Eyes, Central nervous system  
Assessment: Causes damage to organs.

**STOT-repeated exposure**

Not classified based on available information.

**Ingredients:****Methyltrimethoxysilane:**

Routes of exposure: inhalation (vapor)  
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Routes of exposure: Ingestion  
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

**Octamethylcyclotetrasiloxane:**

Routes of exposure: Ingestion  
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Routes of exposure: inhalation (vapor)  
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Routes of exposure: Skin contact  
Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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**Repeated dose toxicity****Ingredients:****Methyltrimethoxysilane:**

Species: Rat  
Application Route: inhalation (vapor)  
Remarks: Based on test data

Species: Rat  
Application Route: Ingestion  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rat  
Application Route: Ingestion  
Remarks: Based on test data

Species: Rat  
Application Route: inhalation (vapor)  
Remarks: Based on test data

Species: Rabbit  
Application Route: Skin contact  
Remarks: Based on test data

**Methanol:**

Species: Rat  
NOAEL: 1.06 mg/l  
Application Route: inhalation (vapor)  
Exposure time: 90 Days

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Further information****Ingredients:****Octamethylcyclotetrasiloxane:**

Remarks: Results from a 2 year repeated vapor inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

## SECTION 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Ingredients:**Methyltrimethoxysilane:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia sp.): > 100 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 3.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: No toxicity at the limit of solubility.
- EC10 (Pseudokirchneriella subcapitata (green algae)): > 3.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: No toxicity at the limit of solubility.
- Toxicity to bacteria : EC50: > 100 mg/l  
Method: OECD Test Guideline 209

**Octamethylcyclotetrasiloxane:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.022 mg/l  
Exposure time: 96 h  
Remarks: No toxicity at the limit of solubility.
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia sp.): > 0.015 mg/l  
Exposure time: 48 h  
Remarks: No toxicity at the limit of solubility.
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): >= 0.0044 mg/l  
Remarks: No toxicity at the limit of solubility.
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 0.0079 mg/l  
Exposure time: 21 d  
Remarks: No toxicity at the limit of solubility.

**Ecotoxicology Assessment**

- Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

**Methanol:**

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l  
Exposure time: 96 h

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l  
Exposure time: 200 h

Toxicity to bacteria : IC50: > 1,000 mg/l  
Exposure time: 3 h

**Persistence and degradability****Ingredients:****Methyltrimethoxysilane:**

Stability in water : Degradation half life: 2.2 h pH: 7

**Octamethylcyclotetrasiloxane:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 3.7 %  
Exposure time: 28 d  
Method: OECD Test Guideline 310

Stability in water : Degradation half life: 69.3 - 144 h (24.6 °C) pH: 7  
Method: OECD Test Guideline 111

**Methanol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 95 %  
Exposure time: 20 d

**Bioaccumulative potential****Ingredients:****Methyltrimethoxysilane:**

Partition coefficient: n-octanol/water : log Pow: -2.36

**Octamethylcyclotetrasiloxane:**

Partition coefficient: n-octanol/water : log Pow: 6.48 (25.1 °C)

**Methanol:**

Bioaccumulation : Species: Leuciscus idus (Golden orfe)  
Bioconcentration factor (BCF): < 10

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Partition coefficient: n-octanol/water : log Pow: -0.77

**Mobility in soil**

No data available

**Other adverse effects****Ingredients:****Octamethylcyclotetrasiloxane:**

Results of PBT and vPvB assessment : Remarks: Octamethylcyclotetrasiloxane (D4) meets the current REACH Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed and deemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation**

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
 Date of first issue: 02/10/2015

**49 CFR**

Not regulated as a dangerous good

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

| Ingredients | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|-------------|---------|--------------------|-----------------------------|
| Methanol    | 67-56-1 | 5000               | *                           |

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Chronic Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**US State Regulations****Pennsylvania Right To Know**

|   |            |
|---|------------|
| Dimethyl siloxane, hydroxy-terminated     | 70131-67-8 |
| Hexamethyldisilazane reaction with Silica | 68909-20-6 |
| Methanol                                  | 67-56-1    |

**California Prop. 65** WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Methanol 67-56-1

**The ingredients of this product are reported in the following inventories:**

NZIoC All ingredients listed or exempt.

TSCA All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

AICS All ingredients listed or exempt.

IECSC All ingredients listed or exempt.

ENCS/ISHL All components are listed on ENCS/ISHL or exempted from inventory listing.

KECI All ingredients listed, exempt or notified.

PICCS All ingredients listed or exempt.

DSL All chemical substances in this product comply with the CEPA

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

## REACH

For purchases from Dow Corning EU legal entities, all ingredients are currently pre/registered or exempt under REACH. For purchases from non-EU Dow Corning legal entities with the intention to export into EEA please contact your DC representative/local office.

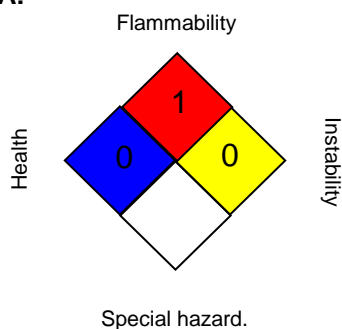
## TCSI

All ingredients listed or exempt.

## SECTION 16. OTHER INFORMATION

## Further information

## NFPA:



## HMIS III:

|                 |    |
|-----------------|----|
| HEALTH          | 0* |
| FLAMMABILITY    | 1  |
| PHYSICAL HAZARD | 0  |

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

## Full text of other abbreviations

|                 |   |
|-----------------|---|
| ACGIH           | : USA. ACGIH Threshold Limit Values (TLV)   |
| ACGIH BEI       | : ACGIH - Biological Exposure Indices (BEI)   |
| DCC OEL         | : Dow Corning Guide   |
| NIOSH REL       | : USA. NIOSH Recommended Exposure Limits  |
| OSHA Z-1        | : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants          |
| OSHA Z-3        | : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts                        |
| US WEEL         | : USA. Workplace Environmental Exposure Levels (WEEL)                                       |
| ACGIH / TWA     | : 8-hour, time-weighted average   |
| ACGIH / STEL    | : Short-term exposure limit   |
| DCC OEL / TWA   | : Time weighted average   |
| NIOSH REL / TWA | : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST  | : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday    |
| OSHA Z-1 / TWA  | : 8-hour time weighted average  |
| OSHA Z-3 / TWA  | : 8-hour time weighted average  |
| US WEEL / TWA   | : 8-hr TWA  |

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 07/14/2016

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

|               |   |
|---------------|---|
| Chemical Name | Not applicable.   |
| CAS No.       | Mixture   |
| Trade Name    | DuPont™ Non-Stick Dry Film Lubricant with Teflon® fluoropolymer - Aerosol |
| Product Code  | None  |

#### Relevant identified uses of the substance or mixture and uses advised against

|                      |           |
|----------------------|-----------|
| Identified Use(s)    | Lubricant |
| Uses Advised Against | None      |

|                        |  |
|------------------------|--|
| Company Identification | Finish Line Technologies, Inc.<br>50 Wireless Blvd.<br>Hauppauge, NY 11788 |
|------------------------|--|

|                           |  |
|---------------------------|--|
| Telephone                 | (631) 666-7300   |
| E-Mail (competent person) | <a href="mailto:SDSinfo@finishlineusa.com">SDSinfo@finishlineusa.com</a> |

#### Emergency telephone number

|                     |   |
|---------------------|---|
| Emergency Phone No. | <b>Medical Emergency:</b> PROSAR 24 hr: 1-800-217-5157 / 1-651-523-0304 |
|---------------------|---|

**Transportation Emergency:** CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Asp. Tox. 1

#### Label elements

Hazard Symbol



**DANGER**

Signal Word(s)

Hazard Statement(s)

Extremely flammable aerosol.  
Pressurized container: May burst if heated.  
May be fatal if swallowed and enters airways.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause drowsiness or dizziness.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
Avoid breathing spray.  
Wash hands and exposed skin thoroughly after handling:



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Use only outdoors or in a well-ventilated area.

Keep out of reach of children.

Other hazards

None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s)              | % wt.   | CAS No.     |
|--------------------------------------|---------|-------------|
| Isopropanol                          | 40 - 50 | 64-67-0     |
| Heptane, branched, cyclic and linear | 20 - 30 | 426260-76-6 |
| Propane                              | 5 - 15  | 74-98-6     |
| n-Butane                             | 5 - 15  | 106-97-8    |

Additional Information - None

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation

Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

Skin Contact

Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated clothing and wash it before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.

Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

-Unsuitable Extinguishing Media

Do not use water jet.

**Special hazards arising from the substance or mixture**

Highly flammable vapor (flash point below 23°C).

**Advice for fire-fighters**

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Wear protective gloves/eye protection. Avoid breathing spray. Use product in a well-ventilated area only.

**Environmental precautions**

Prevent liquid entering sewers, basements and workpits.

**Methods and material for containment and cleaning up**

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

**Reference to other sections**

None

**Additional Information**

None

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Use product in a well-ventilated area only. Avoid breathing spray.

**Conditions for safe storage, including any incompatibilities**

-Storage temperature

Keep out of reach of children. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Keep in a cool, well ventilated place. Keep container tightly closed.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidising chemicals.

**Specific end use(s)**

Lubricant

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

| SUBSTANCE.                           | CAS No.     | (8hr TWA)  |                        | STEL       |             | Note:      |
|--------------------------------------|-------------|------------|------------------------|------------|-------------|------------|
|                                      |             | PEL (OSHA) | TLV (ACGIH)            | PEL (OSHA) | TLV (ACGIH) |            |
| Heptane, branched, cyclic and linear | 426260-76-6 | 500 ppm*   | 1500 mg/m <sup>3</sup> | -----      | -----       | *n-heptane |
| Isopropanol                          | 67-63-0     | 400 ppm    | 200 ppm                | -----      | 400 ppm     | -----      |
| n-Butane                             | 106-97-8    | -----      | 250 ppm                | -----      | -----       | -----      |
| Propane                              | 74-98-6     | 1000 ppm   | Aspyx.#                | -----      | -----       | #          |

#Assure minimum oxygen content of work atmosphere.

**Recommended monitoring method**

NIOSH 1500 (hydrocarbons, B.P. 36 - 216 °C); NIOSH 1400 (Alcohols I)

**Exposure controls**



## DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

### Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

### Personal protection equipment

#### Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

#### Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber). Check with protective equipment manufacturer's data.

#### Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

#### Thermal hazards

Not normally required.

### Environmental Exposure Controls

Avoid release to the environment.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance

Color.

Odor

Odor Threshold (ppm)

pH (Value)

Melting Point (°C) / Freezing Point (°C)

Boiling point/boiling range (C):

Flash Point (°C)

Evaporation Rate

Flammability (solid, gas)

Explosive Limit Ranges

Vapour pressure (Pascal)

Vapour Density (Air=1)

Density (g/ml)

Solubility (Water)

Solubility (Other)

Partition Coefficient (n-Octanol/water)

Auto Ignition Point (°C)

Decomposition Temperature (°C)

Kinematic Viscosity (cSt)

Explosive properties

Oxidizing properties

#### Other information

Aerosol spray

White (Translucent)

Petroleum spirit

Not available

Not available

Not available

Not available

-104 (Propane)

Not available

Highly flammable

2.1% - 9.5% v/v (Propane)

ca 95 x 10<sup>4</sup> (Propane)

ca 1.56 @ 0°C (Propane)

Not available

Not available

Not available

Not available

450 (Propane)

Not available

<20 @ 40 °C

Not explosive.

Not oxidizing.

Not available



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SECTION 10: STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | Stable under normal conditions.                    |
| Chemical stability                 | Stable.  |
| Possibility of hazardous reactions | None anticipated.                                  |
| Conditions to avoid                | Avoid contact with heat and ignition sources.      |
| Incompatible materials             | Strong oxidising agents                            |
| Hazardous decomposition product(s) | Carbon monoxide, Carbon dioxide, Acid smoke, Other |

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

Toxicity - Substances in preparations / mixtures

**Information on toxicological effects**

Isopropanol (CAS# 67-63-0):

|                        |  |
|------------------------|--|
| Acute toxicity         | Oral: LD50 = 5.84 g/kg (rat)<br>Inhalation: LC50 > 1000 ppm (rat) 6 hour(s)<br>Dermal: LD50 = 16.4 ml/kg (rabbit) 24 hour(s)<br>May cause drowsiness or dizziness. |
| Irritation/Corrosivity | Irritating to eyes.  |
| Sensitization          | It is not a skin sensitizer.   |
| Repeated dose toxicity | NOAEL = 5,000 ppm (Inhalation)<br>May cause drowsiness or dizziness.   |
| Carcinogenicity        | It is unlikely to present a carcinogenic hazard to man.  |

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

**Mutagenicity** There is no evidence of mutagenic potential.

**Reproductive toxicity** Not available

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                        |  |
|------------------------|--|
| Acute toxicity         | Oral: LD50 >5 g/kg-bw<br>Dermal: LD50 >2 g/kg-bw<br>Inhalation: LC50 = 65 - 103 mg/L (Vapor), 4-hr. rat<br>May cause drowsiness or dizziness.<br>May be fatal if swallowed and enters airways. |
| Irritation/Corrosivity | Causes skin irritation. Repeated exposure may cause skin dryness or cracking. May cause eye irritation.  |
| Sensitization          | It is not a skin sensitizer.   |
| Repeated dose toxicity | NOAEC: 12350 mg/m3 (2 yr, inhal., rat, Systemic effects)<br>LOAEC: 1650 mg/m3 (2 hr, inhal., rat, CNS effects)<br>May cause drowsiness or dizziness.   |
| Carcinogenicity        | No data. It is unlikely to present a carcinogenic hazard to man.   |

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

**Mutagenicity** There is no evidence of mutagenic potential.

**Toxicity for reproduction** No information available



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

#### Isopropanol (CAS# 67-63-0):

|                                    |  |
|------------------------------------|--|
| Short term                         | LC50 (96 hour): 10,000 mg/l (Fathead minnow ( <i>Pimephales promelas</i> ))<br>LC50 24hour(s): >10,000 mg/l ( <i>Daphnia magna</i> )<br>NOEC: 3.37 µmol/l ( <i>Daphnia magna</i> ) (Growth rate) |
| Long Term                          | Not available.   |
| Persistence and degradability      | Not available.   |
| Bioaccumulative potential          | Not available.   |
| Mobility in soil                   | Not available.   |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.   |
| Other adverse effects              | None known.  |

#### Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                                    |   |
|------------------------------------|---|
| Short term                         | LL50 (96 hour): >13.4 mg/L ( <i>Oncorhynchus mykiss</i> )<br>EL50 (48 hour): 3 mg/l ( <i>Daphnia magna</i> , mobility)<br>EC50 (96 hour): 13 mg/l ( <i>Pseudokirchnerella subcapitata</i> ) |
| Long Term                          | NOELR (28 days) 1.5 mg/l ( <i>Fish</i> ) QSAR<br>LOEC (21 days): 0.32 mg/l ( <i>Daphnia magna</i> )<br>NOEL (96 hour) 6.3 mg/l ( <i>Algae</i> )   |
| Persistence and degradability      | Not available.  |
| Bioaccumulative potential          | Not available.  |
| Mobility in soil                   | Not available.  |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.  |
| Other adverse effects              | None known.   |

## SECTION 13: DISPOSAL CONSIDERATIONS

|                         |  |
|-------------------------|--|
| Waste treatment methods | Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice. |
|-------------------------|--|

## SECTION 14: TRANSPORT INFORMATION

|   | Land transport<br>(U.S. DOT) | Sea transport<br>(IMDG) | Air transport<br>(ICAO/IATA) |
|---|------------------------------|-------------------------|------------------------------|
| UN number   | 1950                         | 1950                    | 1950                         |
| Proper Shipping Name  | Aerosols, flammable          | Aerosols, flammable     | Aerosols, flammable          |
| Transport hazard class(es)  | 2.1                          | 2.1                     | 2.1                          |
| Packing group   | None.                        | None.                   | None.                        |
| Environmental hazards   | No.                          | No.                     | No.                          |
| Special precautions for user  | None assigned                | None assigned           | None assigned                |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable |                              |                         |                              |

## SECTION 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

TSCA 12(b) Export Notification: CAS 9002-84-0 Polytetrafluoroethylene

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None          | ----    | ----         | ----        |

## SARA 311/312 - Hazard Categories:

☒ Fire   ☒ Sudden Release   ☐ Reactivity   ☒ Immediate (acute)   ☐ Chronic (delayed)

## SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|---------|--------------|
| Isopropanol   | 67-63-0 | 42           |

## SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None          | ----    | ----         | ----         |

## California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None          | ----    | ----             |

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: March 26, 2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

|               |   |
|---------------|---|
| Chemical Name | Not applicable.   |
| CAS No.       | Mixture   |
| Trade Name    | DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol |
| Product Code  | None  |

#### Relevant identified uses of the substance or mixture and uses advised against

|                      |           |
|----------------------|-----------|
| Identified Use(s)    | Lubricant |
| Uses Advised Against | None      |

|                        |  |
|------------------------|--|
| Company Identification | Finish Line Technologies, Inc.<br>50 Wireless Blvd.<br>Hauppauge, NY 11788 |
|------------------------|--|

|                           |  |
|---------------------------|--|
| Telephone                 | (631) 666-7300   |
| E-Mail (competent person) | <a href="mailto:SDSinfo@finishlineusa.com">SDSinfo@finishlineusa.com</a> |

#### Emergency telephone number

|                     |   |
|---------------------|---|
| Emergency Phone No. | <b>Medical Emergency:</b> PROSAR 24 hr: 1-800-217-5157 / 1-651-523-0304 |
|---------------------|---|

**Transportation Emergency:** CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1

#### Label elements

Hazard Symbol



#### DANGER

Hazard Statement(s)

Extremely flammable aerosol.  
Pressurized container: May burst if heated.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause drowsiness or dizziness.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
Avoid breathing spray.  
Wash hands and exposed skin thoroughly after handling:  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.  
Use only outdoors or in a well-ventilated area.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

Keep out of reach of children.

Other hazards

None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s)   | % wt.   | CAS No.     |
|---|---------|-------------|
| Heptane, branched, cyclic and linear  | 15 - 25 | 426260-76-6 |
| Distillates (petroleum), hydrotreated light   | 15 - 25 | 64742-47-8  |
| Distillates (petroleum), blend of various solvent-refined and hydrotreated heavy paraffinic and residual oils | 1 - 20  | mixture     |
| Propane   | 5 - 15  | 74-98-6     |
| Butane  | 5 - 15  | 106-97-8    |

Additional Information - None

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation

Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

Skin Contact

Wash affected skin with soap and water. If symptoms develop, obtain medical attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms occur obtain medical attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

May be fatal if swallowed and enters airways. Will cause skin irritation. Vapours may cause drowsiness and dizziness.

**Indication of any immediate medical attention and special treatment needed**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.

-Unsuitable Extinguishing Media

Do not use water jet.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

Special hazards arising from the substance or mixture

Highly flammable vapor (flash point below 23°C).

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Take precautionary measures against static discharges. Avoid contact with skin and eyes.

Environmental precautions

Prevent liquid entering sewers, basements and workpits.

Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections

None

Additional Information

None

## SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid contact with skin and eyes. Use product in a well-ventilated area only.

Conditions for safe storage, including any incompatibilities

-Storage temperature

Keep in a cool, well ventilated place.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidising chemicals.

Specific end use(s)

Lubricant

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

| SUBSTANCE.                           | CAS No.     | (8hr TWA)           |                                    | STEL       |             | Note:                    |
|--------------------------------------|-------------|---------------------|------------------------------------|------------|-------------|--------------------------|
|                                      |             | PEL (OSHA)          | TLV (ACGIH)                        | PEL (OSHA) | TLV (ACGIH) |                          |
| Heptane, branched, cyclic and linear | 426260-76-6 | 500 ppm*            | 1500 mg/m <sup>3</sup>             | -----      | -----       | *n-heptane               |
| Oil mist (mineral)                   | -----       | 5 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> <sup>(1)</sup> | -----      | -----       | <sup>(1)</sup> Inhalable |
| Propane                              | 74-98-6     | 1000 ppm            | Aspyx.#                            | -----      | -----       | #                        |

\*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method

NIOSH 1500 (hydrocarbons, B.P. 36 - 216 °C) ; NIOSH 5026 (Oil mist; mineral)

Exposure controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).





# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber)

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not normally required.

Environmental Exposure Controls

None known

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|  |                                |
|--|--------------------------------|
| Appearance                               | Liquid / Liquefied gas         |
| Color.                                   | Clear / Colourless             |
| Odor                                     | Petroleum spirit               |
| Odor Threshold (ppm)                     | Not available                  |
| pH (Value)                               | Not available                  |
| Melting Point (°C) / Freezing Point (°C) | Not available                  |
| Boiling point/boiling range (°C):        | 94 - 98 (201 - 208 °F)         |
| Flash Point (°C)                         | -104 (Propane)                 |
| Evaporation Rate                         | Not available                  |
| Flammability (solid, gas)                | Extremely flammable            |
| Explosive Limit Ranges                   | 2.1% - 9.5% v/v (Propane)      |
| Vapour pressure (Pascal)                 | ca. $95 \times 10^4$ (Propane) |
| Vapour Density (Air=1)                   | ca. 1.56 @ 0°C (Propane)       |
| Density (g/ml)                           | Not available                  |
| Solubility (Water)                       | Not available                  |
| Solubility (Other)                       | Not available                  |
| Partition Coefficient (n-Octanol/water)  | Not available                  |
| Auto Ignition Point (°C)                 | Not available                  |
| Decomposition Temperature (°C)           | Not available                  |
| Kinematic Viscosity (cSt)                | <10 @ 40 °C                    |
| Explosive properties                     | Not explosive.                 |
| Oxidizing properties                     | Not oxidizing.                 |

### Other information

VOC content = 59% by wt.

## SECTION 10: STABILITY AND REACTIVITY

|                                    |   |
|------------------------------------|---|
| Reactivity                         | Stable under normal conditions.                     |
| Chemical stability                 | Stable.   |
| Possibility of hazardous reactions | None anticipated.                                   |
| Conditions to avoid                | Avoid contact with heat and ignition sources.       |
| Incompatible materials             | Strong oxidising agents                             |
| Hazardous decomposition product(s) | Carbon monoxide, Carbon dioxide, Acrid smoke, Other |

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## Acute toxicity

Oral: LD50 >5 g/kg-bw  
Dermal: LD50 >2 g/kg-bw  
Inhalation: LC50 = 65 - 103 mg/L (Vapor), 4-hr. rat  
May cause drowsiness or dizziness.  
May be fatal if swallowed and enters airways.

## Irritation/Corrosivity

Causes skin irritation. Repeated exposure may cause skin dryness or cracking. Causes eye irritation.

## Sensitization

It is not a skin sensitizer.

## Repeated dose toxicity

NOAEC: 12350 mg/m3 (2 yr, inhal., rat, Systemic effects)  
LOAEC: 1650 mg/m3 (2 hr, inhal., rat, CNS effects)  
May cause drowsiness or dizziness.

## Carcinogenicity

No data. It is unlikely to present a carcinogenic hazard to man.

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

## Mutagenicity

There is no evidence of mutagenic potential.

## Toxicity for reproduction

No information available

## SECTION 12: ECOLOGICAL INFORMATION

Toxicity - Substances in preparations / mixtures

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                                    |   |
|------------------------------------|---|
| Short term                         | LL50 (96 hour): >13.4 mg/L ( <i>Oncorhynchus mykiss</i> )<br>EL50 (48 hour): 3 mg/l ( <i>Daphnia magna</i> , mobility)<br>EC50 (96 hour): 13 mg/l ( <i>Pseudokirchnerella subcapitata</i> ) |
| Long Term                          | NOELR (28 days) 1.5 mg/l ( <i>Fish</i> ) QSAR<br>LOEC (21 days): 0.32 mg/l ( <i>Daphnia magna</i> )<br>NOEL (96 hour) 6.3 mg/l ( <i>Algae</i> )   |
| Persistence and degradability      | Not available.  |
| Bioaccumulative potential          | Not available.  |
| Mobility in soil                   | Not available.  |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.  |
| Other adverse effects              | None known.   |

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

## SECTION 14: TRANSPORT INFORMATION

|                              | Land transport<br>(U.S. DOT) | Sea transport<br>(IMDG) | Air transport<br>(ICAO/IATA) |
|------------------------------|------------------------------|-------------------------|------------------------------|
| UN number                    | 1950                         | 1950                    | 1950                         |
| Proper Shipping Name         | Aerosols, flammable          | Aerosols, flammable     | Aerosols, flammable          |
| Transport hazard class(es)   | 2.1                          | 2.1                     | 2.1                          |
| Packing group                | Not applicable               | Not applicable          | Not applicable               |
| Environmental hazards        | No.                          | No.                     | No.                          |
| Special precautions for user | None assigned                | None assigned           | None assigned                |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None          | ----    | ----         | ----        |

SARA 311/312 - Hazard Categories:

☒ Fire   ☒ Sudden Release   ☐ Reactivity   ☒ Immediate (acute)   ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|---------|--------------|
| None          | ----    | ----         |

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None          | ----    | ----         | ----         |

California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None          | ----    | ----             |

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: March 17, 2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

# SAFETY DATA SHEET



Techspray E-LINE BLUE SHOWER Maintenance Cleaner

## Section 1. Identification

**GHS product identifier** : Techspray E-LINE BLUE SHOWER Maintenance Cleaner  
**Product code** : 1620-10S  
**Other means of identification** : Degreasers  
**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

**Supplier's details** : Techspray  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
Tel: 678-819-1408  
Toll free: 800-858-4043  
Fax: 806-372-8750

**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300  
CANUTEC (Canadian Transportation): (613) 996-6666  
Emergency phone: (800) 858-4043  
24/

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
GASES UNDER PRESSURE Compressed gas  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%

### GHS label elements

**Hazard pictograms**



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
Causes serious eye irritation.  
Contains gas under pressure; may explode if heated.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

**Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Degreasers

| Ingredient name   | %         | CAS number |
|-------------------|-----------|------------|
| ethanol           | ≥10 - ≤25 | 64-17-5    |
| Isopropyl alcohol | ≥10 - ≤25 | 67-63-0    |
| methanol          | ≤3        | 67-56-1    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
carbonyl halides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### [Control parameters](#)

#### [Occupational exposure limits](#)

| Ingredient name   | Exposure limits   |
|-------------------|---|
| ethanol           | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 1000 ppm 15 minutes.<br><b>NIOSH REL (United States, 10/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 10 hours.<br>TWA: 1000 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.  |
| Isopropyl alcohol | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 400 ppm 15 minutes.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 10 hours.<br>TWA: 400 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.  |
| methanol          | <b>ACGIH TLV (United States, 3/2015).</b><br><b>Absorbed through skin.</b><br>STEL: 328 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 262 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 10 hours.<br>TWA: 200 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours. |

### [Appropriate engineering controls](#)

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

|  |  |
|--|--|
| <b>Environmental exposure controls</b> | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.   |
| <b>Individual protection measures</b>  |  |
| <b>Hygiene measures</b>                | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.  |
| <b>Eye/face protection</b>             | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.   |
| <b>Skin protection</b>                 |  |
| <b>Hand protection</b>                 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>                 | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.  |
| <b>Other skin protection</b>           | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b>          | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |

## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Appearance</b>                                   |  |
| <b>Physical state</b>                               | : Liquid.  |
| <b>Color</b>  | : Clear. Colorless.  |
| <b>Odor</b>   | : Characteristic.  |
| <b>Odor threshold</b>                               | : Not available.   |
| <b>pH</b>   | : Not applicable.  |
| <b>Melting point</b>                                | : Not available.   |
| <b>Boiling point</b>                                | : Not available.   |
| <b>Flash point</b>                                  | : Not available.   |
| <b>Evaporation rate</b>                             | : >1 ((TCE=1) = 1)   |
| <b>Flammability (solid, gas)</b>                    | : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 1.1%<br>Upper: 6.7%   |
| <b>Vapor pressure</b>                               | : 7.4 kPa (55.5 mm Hg) [room temperature]  |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : Not available.   |
| <b>Solubility</b>                                   | : Not available.   |

## Section 9. Physical and chemical properties

|   |                  |
|---|------------------|
| <b>Solubility in water</b>                    | : Not available. |
| <b>Partition coefficient: n-octanol/water</b> | : Not available. |
| <b>Auto-ignition temperature</b>              | : Not available. |
| <b>Decomposition temperature</b>              | : Not available. |
| <b>Viscosity</b>                              | : Not available. |
| <b>Flow time (ISO 2431)</b>                   | : Not available. |

### Aerosol product

|                           |              |
|---------------------------|--------------|
| <b>Type of aerosol</b>    | : Spray      |
| <b>Heat of combustion</b> | : 30.26 kJ/g |

## Section 10. Stability and reactivity

|                   |  |
|-------------------|--|
| <b>Reactivity</b> | : No specific test data related to reactivity available for this product or its ingredients. |
|-------------------|--|

|                           |                          |
|---------------------------|--------------------------|
| <b>Chemical stability</b> | : The product is stable. |
|---------------------------|--------------------------|

|   |   |
|---|---|
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur. |
|---|---|

|                            |  |
|----------------------------|--|
| <b>Conditions to avoid</b> | : Avoid all possible sources of ignition (spark or flame). |
|----------------------------|--|

|                               |                     |
|-------------------------------|---------------------|
| <b>Incompatible materials</b> | : No specific data. |
|-------------------------------|---------------------|

|   |  |
|---|--|
| <b>Hazardous decomposition products</b> | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
|---|--|

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result                | Species | Dose                     | Exposure |
|-------------------------|-----------------------|---------|--------------------------|----------|
| ethanol                 | LC50 Inhalation Vapor | Rat     | 124700 mg/m <sup>3</sup> | 4 hours  |
|                         | LD50 Oral             | Rat     | 7 g/kg                   | -        |
| Isopropyl alcohol       | LD50 Dermal           | Rabbit  | 12800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5000 mg/kg               | -        |
| methanol                | LC50 Inhalation Gas.  | Rat     | 145000 ppm               | 1 hours  |
|                         | LC50 Inhalation Gas.  | Rat     | 64000 ppm                | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 15800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5600 mg/kg               | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                           | Observation |
|-------------------------|--------------------------|---------|-------|------------------------------------|-------------|
| ethanol                 | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams            | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 0.066666667 minutes 100 milligrams | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 100 microliters                    | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 500 milligrams                     | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 400 milligrams                     | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 milligrams             | -           |
| Isopropyl alcohol       | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100                       | -           |

## Section 11. Toxicological information

|          |                          |        |   |               |   |
|----------|--------------------------|--------|---|---------------|---|
| methanol | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          | Eyes - Severe irritant   | Rabbit | - | 10 milligrams | - |
|          |                          |        |   | 100           | - |
|          | Skin - Mild irritant     | Rabbit | - | milligrams    | - |
|          |                          |        |   | 500           | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 24 hours 100  | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 40 milligrams | - |
|          | Skin - Moderate irritant | Rabbit | - | 24 hours 20   | - |
|          |                          |        |   | milligrams    | - |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA  | IARC | NTP |
|-------------------------|-------|------|-----|
| ethanol                 | -     | 1    | -   |
| Isopropyl alcohol       | -     | 3    | -   |
| methanol                | None. | -    | -   |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

## Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 39113.6 mg/kg |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result  | Species                                    | Exposure |
|-------------------------|---|--|----------|
| ethanol                 | Acute EC50 17.921 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute EC50 2000 µg/l Fresh water                | Daphnia - Daphnia magna                    | 48 hours |
|                         | Acute LC50 25500 µg/l Marine water              | Crustaceans - Artemia franciscana - Larvae | 48 hours |
|                         | Acute LC50 42000 µg/l Fresh water               | Fish - Oncorhynchus mykiss                 | 4 days   |
|                         | Chronic NOEC 4.995 mg/l Marine water            | Algae - Ulva pertusa                       | 96 hours |
|                         | Chronic NOEC 100 µl/L Fresh water               | Daphnia - Daphnia magna - Neonate          | 21 days  |
|                         | Chronic NOEC 0.375 µl/L Fresh water             | Fish - Gambusia holbrooki - Larvae         | 12 weeks |
| Isopropyl alcohol       | Acute LC50 1400000 to 1950000 µg/l Marine water | Crustaceans - Crangon crangon              | 48 hours |
| methanol                | Acute LC50 4200 mg/l Fresh water                | Fish - Rasbora heteromorpha                | 96 hours |
|                         | Acute EC50 16.912 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute LC50 2500000 µg/l Marine water            | Crustaceans - Crangon crangon -            | 48 hours |

## Section 12. Ecological information

|  |  |  |          |
|--|--|--|----------|
|  | Acute LC50 3289 to 4395 mg/l Fresh water | Adult<br>Daphnia - Daphnia magna - Neonate | 48 hours |
|  | Acute LC50 290 mg/l Fresh water          | Fish - Danio rerio - Egg                   | 96 hours |
|  | Chronic NOEC 9.96 mg/l Marine water      | Algae - Ulva pertusa                       | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethanol                 | -0.35              | -   | low       |
| Isopropyl alcohol       | 0.05               | -   | low       |
| methanol                | -0.77              | <10 | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.





### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                       | CAS #   | Status | Reference number |
|----------------------------------|---------|--------|------------------|
| Methanol (I); Methyl alcohol (I) | 67-56-1 | Listed | U154             |

## Section 14. Transport information

|                         | DOT Classification          | TDG Classification          | Mexico Classification       | ADR/RID                | IMDG   | IATA  |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|--|---|
| UN number               | -                           | -                           | -                           | UN1950                 | UN1950   | ID8000  |
| UN proper shipping name | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Aerosols,<br>flammable | AEROSOLS IN LIMITED QUANTITIES OF CLASS 2 (heptane, 1, 1-difluoroethane) | Consumer commodity<br>ORM-D<br>ID8000 (ethanol) |
|                         |                             |                             |                             |                        |  |   |

## Section 14. Transport information

|                                   |   |   |       |  |  |  |
|-----------------------------------|---|---|-------|--|--|--|
| <b>Transport hazard class(es)</b> | ORM-D   | ORM-D   | ORM-D | 2<br><br>                                | 2.1<br> | 9<br>                 |
| <b>Packing group</b>              | -   | -   | -     | II   | II   | -  |
| <b>Environmental hazards</b>      | Yes.  | No.   | No.   | Yes.   | No.  | No.  |
| <b>Additional information</b>     | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). | -     | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><br><b><u>Hazard identification number</u></b><br>UN1950<br><br><b><u>Tunnel code</u></b><br>(D) | -  | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** heptane  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Air Act (CAA) 112 regulated flammable substances:** 1,1-difluoroethane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Sudden release of pressure  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

| Name              | %         | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------|-----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| ethanol           | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | Yes.                            |
| Isopropyl alcohol | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | No.                             |
| methanol          | ≤3        | Yes.        | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|  | Product name                  | CAS number         | %               |
|--|-------------------------------|--------------------|-----------------|
| <b>Form R - Reporting requirements</b> | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |
| <b>Supplier notification</b>           | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: HEPTANE; N-HEPTANE; DIFLUOROETHANE; ETHYL ALCOHOL; DENATURED ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHANOL; METHYL ALCOHOL
- New York** : The following components are listed: Methanol
- New Jersey** : The following components are listed: n-HEPTANE; HEPTANE; 1,1-DIFLUOROETHANE; ETHANE, 1,1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHYL ALCOHOL; METHANOL
- Pennsylvania** : The following components are listed: HEPTANE; DENATURED ALCOHOL; ETHANOL; ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS); METHANOL

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name     | Cancer     | Reproductive | No significant risk level | Maximum acceptable dosage level                              |
|---------------------|------------|--------------|---------------------------|--|
| ethanol<br>methanol | No.<br>No. | No.<br>Yes.  | Yes.<br>No.               | No.<br>23000 µg/day (ingestion)<br>47000 µg/day (inhalation) |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

|                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Europe</b>            | : All components are listed or exempted.  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS):</b> All components are listed or exempted.<br><b>Japan inventory (ISHL):</b> Not determined. |
| <b>Malaysia</b>          | : Not determined.   |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : All components are listed or exempted.  |
| <b>Turkey</b>            | : All components are listed or exempted.  |

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |
|                  |   |   |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

## Section 16. Other information

| Classification  | Justification  |
|---|--|
| FLAMMABLE AEROSOLS - Category 1<br>GASES UNDER PRESSURE - Compressed gas<br>SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 1A | On basis of test data<br>On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method |

### History

**Date of printing** : 8/15/2019

**Date of issue/Date of revision** : 8/15/2019

**Date of previous issue** : 8/15/2019

**Version** : 2

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## SAFETY DATA SHEET

### Lubricating Oil

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

|                         |                             |
|-------------------------|-----------------------------|
| Product name            | Lubricating Oil             |
| Chemical name           | Process Oil                 |
| Product number          | 1003, 1003B, 1003RB, 1003CN |
| Internal identification | 1000-202                    |
| CAS number              | 64742-54-7                  |

##### Recommended use of the chemical and restrictions on use

|                      |  |
|----------------------|--|
| Application          | Firearm Lubrication                              |
| Uses advised against | No specific uses advised against are identified. |

##### Details of the supplier of the safety data sheet

|              |   |
|--------------|---|
| Manufacturer | Bushnell Holdings Inc<br>9200 Cody<br>Overland Park, KS 66214<br>1-800-423-3537<br>dangerous.goods@vistaoutdoor.com |
|--------------|---|

##### Emergency telephone number

|                     |   |
|---------------------|---|
| Emergency telephone | Emergency Telephone Number (Hazardous Material/Dangerous Goods Transportation Emergency Only) 1-800-424-9300 (Inside US Only) +01-703-527-3887 (Outside US) - (CHEMTREC, Day and Night) |
|---------------------|---|

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

|                       |                |
|-----------------------|----------------|
| Physical hazards      | Not Classified |
| Health hazards        | Not Classified |
| Environmental hazards | Not Classified |

##### Label elements

|                   |                   |
|-------------------|-------------------|
| Hazard statements | NC Not Classified |
|-------------------|-------------------|

##### Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

#### 3. Composition/information on ingredients

##### Substances

|               |                 |
|---------------|-----------------|
| Product name  | Lubricating Oil |
| Chemical name | Process Oil     |
| CAS number    | 64742-54-7      |

#### 4. First-aid measures

##### Description of first aid measures

## Lubricating Oil

|                                   |  |
|-----------------------------------|--|
| <b>General information</b>        | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.   |
| <b>Inhalation</b>                 | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. |
| <b>Ingestion</b>                  | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.  |
| <b>Skin Contact</b>               | No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.  |
| <b>Eye contact</b>                | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.  |
| <b>Protection of first aiders</b> | Use protective equipment appropriate for surrounding materials.  |

### Most important symptoms and effects, both acute and delayed

|                            |   |
|----------------------------|---|
| <b>General information</b> | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known. Spray/mists may cause respiratory tract irritation.                             |
| <b>Ingestion</b>           | No specific symptoms known. May cause discomfort if swallowed.  |
| <b>Skin contact</b>        | No specific symptoms known. May cause discomfort.   |
| <b>Eye contact</b>         | No specific symptoms known. May be slightly irritating to eyes.   |

### Indication of immediate medical attention and special treatment needed

|                             |                                |
|-----------------------------|--------------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically.         |
| <b>Specific treatments</b>  | No special treatment required. |

## 5. Fire-fighting measures

### Extinguishing media

|                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet as an extinguisher, as this will spread the fire.   |

### Special hazards arising from the substance or mixture

|                                      |   |
|--------------------------------------|---|
| <b>Specific hazards</b>              | Containers can burst violently or explode when heated, due to excessive pressure build-up.                  |
| <b>Hazardous combustion products</b> | Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

### Advice for firefighters

|  |   |
|--|---|
| <b>Protective actions during firefighting</b>        | Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. |
| <b>Special protective equipment for firefighters</b> | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.   |

## Lubricating Oil

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** No specific recommendations. For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store away from incompatible materials (see Section 10). No specific recommendations.

**Storage class** Unspecified storage.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 10 mg/m<sup>3</sup>

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

#### Exposure controls

#### Protective equipment



**Appropriate engineering controls** No specific ventilation requirements.

**Eye/face protection** No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

## Lubricating Oil

|  |   |
|--|---|
| <b>Hand protection</b>                 | No specific hand protection recommended. Large Spillages: Wear protective gloves.   |
| <b>Other skin and body protection</b>  | Wear appropriate clothing to prevent repeated or prolonged skin contact.  |
| <b>Hygiene measures</b>                | Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.                                     |
| <b>Respiratory protection</b>          | No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn. |
| <b>Environmental exposure controls</b> | Not regarded as dangerous for the environment.  |

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

|   |                           |
|---|---------------------------|
| <b>Appearance</b>                                   | Clear liquid.             |
| <b>Color</b>  | Water-white.              |
| <b>Odor</b>   | Odorless.                 |
| <b>pH</b>   | Not applicable.           |
| <b>Melting point</b>                                | Not determined.           |
| <b>Initial boiling point and range</b>              | 315°C/599°F               |
| <b>Flash point</b>                                  | 192°C/378°F               |
| <b>Evaporation rate</b>                             | No information available. |
| <b>Flammability (solid, gas)</b>                    | Class IIIB Liquid         |
| <b>Upper/lower flammability or explosive limits</b> | Not available.            |
| <b>Vapor pressure</b>                               | < 0.01 mm Hg @ 25°C       |
| <b>Vapor density</b>                                | > 1.0 g/cc                |
| <b>Relative density</b>                             | 0.866                     |
| <b>Bulk density</b>                                 | 7.228 lb/gal              |
| <b>Solubility(ies)</b>                              | Insoluble in water.       |
| <b>Partition coefficient</b>                        | Not determined.           |
| <b>Auto-ignition temperature</b>                    | 210°C/410°F               |
| <b>Decomposition Temperature</b>                    | Not determined.           |
| <b>Volatility</b>                                   | 3% wt (Max)               |

### 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | See the other subsections of this section for further details.  |
| <b>Stability</b>                          | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
| <b>Possibility of hazardous reactions</b> | No potentially hazardous reactions known.   |

## Lubricating Oil

|   |   |
|---|---|
| <b>Conditions to avoid</b>              | There are no known conditions that are likely to result in a hazardous situation.   |
| <b>Materials to avoid</b>               | No specific material or group of materials is likely to react with the product to produce a hazardous situation.  |
| <b>Hazardous decomposition products</b> | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Not regarded as a health hazard under current legislation.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

## Lubricating Oil

|                            |   |
|----------------------------|---|
| <b>General information</b> | No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known. Spray/mists may cause respiratory tract irritation.   |
| <b>Ingestion</b>           | No specific symptoms known. May cause discomfort if swallowed.  |
| <b>Skin Contact</b>        | No specific symptoms known. May cause discomfort.   |
| <b>Eye contact</b>         | No specific symptoms known. May be slightly irritating to eyes.   |
| <b>Route of entry</b>      | Ingestion Inhalation Skin and/or eye contact  |
| <b>Target Organs</b>       | No specific target organs known.  |

### 12. Ecological Information

|   |   |
|---|---|
| <b>Ecotoxicity</b>                          | Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment. |
| <b>Toxicity</b>                             | Based on available data the classification criteria are not met.  |
| <b><u>Persistence and degradability</u></b> |   |
| <b>Persistence and degradability</b>        | The degradability of the product is not known.  |
| <b><u>Bioaccumulative potential</u></b>     |   |
| <b>Bio-Accumulative Potential</b>           | No data available on bioaccumulation.   |
| <b>Partition coefficient</b>                | Not determined.   |
| <b><u>Mobility in soil</u></b>              |   |
| <b>Mobility</b>                             | No data available.  |
| <b><u>Other adverse effects</u></b>         |   |
| <b>Other adverse effects</b>                | None known.   |

### 13. Disposal considerations

|                                       |  |
|---------------------------------------|--|
| <b><u>Waste treatment methods</u></b> |  |
| <b>General information</b>            | The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.  |
| <b>Disposal methods</b>               | Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority. |

### 14. Transport information

|                                       |  |
|---------------------------------------|--|
| <b>General</b>                        | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT). |
| <b><u>UN Number</u></b>               | Not applicable.  |
| <b><u>UN proper shipping name</u></b> | Not applicable.  |

## Lubricating Oil

### Transport hazard class(es)

No transport warning sign required.

### Packing group

Not applicable.

### Environmental hazards

#### Environmentally Hazardous Substance

No.

### Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## 15. Regulatory information

### US Federal Regulations

#### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

#### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

#### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

#### SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

#### CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

#### FDA - Essential Chemical

None of the ingredients are listed or exempt.

#### FDA - Precursor Chemical

None of the ingredients are listed or exempt.

#### SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

#### OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

### US State Regulations

#### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

## Lubricating Oil

### California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

### Massachusetts "Right To Know" List

None of the ingredients are listed or exempt.

### Rhode Island "Right To Know" List

None of the ingredients are listed or exempt.

### Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

### New Jersey "Right To Know" List

None of the ingredients are listed or exempt.

### Pennsylvania "Right To Know" List

None of the ingredients are listed or exempt.

### Inventories

#### US - TSCA

None of the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

### 16. Other information

**Classification abbreviations and acronyms**      Asp. Tox. = Aspiration hazard

**Training advice**      Only trained personnel should use this material.

**Revision date**      2/8/2019

**Revision**      7

**Supersedes date**      10/9/2017

**SDS No.**      4634

**End of Safety Data Sheet**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



# SLIPKOTE® Specialty Lubricants

manufactured by HUSK-ITT Corporation / SPECIALTY LUBRICANTS Corporation

## Eastern Region Office:

8300 Corporate Park Drive, Macedonia, Ohio 44056  
(330) 425-2567 • FAX (330) 425-9637  
(800) 238-5823 • www.speclubes.com

## Western Region Office:

1580 Industrial Avenue, Norco, California 92860  
(951) 340-4000 • FAX (951) 340-4011  
(800) 4-HUSKEY • www.huskey.com

Conforms to HazCom 2012/United States

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION

**PRODUCT IDENTIFIER(S)/ TRADEMARK(S)  
USED ON THE LABEL:**

SLIPKOTE Air Tool Oil 150  
Husky air tool oil – HDA10800AV  
Campbell Hausfeld (CH) air tool oil – ST127001AV, ST127012AV

**OTHER MEANS OF IDENTIFICATION:**

Product Code – 10640

**CHEMICAL FAMILY:**

Compounded Petroleum Oil

**FORMULA:**

Proprietary Information

**MANUFACTURER:**

SPECIALTY LUBRICANTS CORPORATION  
8300 Corporate Park Drive  
Macedonia, OH 44056 USA  
(P): 1-800-238-5823  
(F): 1-330-425-9637

**EMERGENCY PHONE:**

800-424-9300 (24HR)

**CHEMTREC PHONE:**

800-424-9300 (24HR)

### SECTION 2: HAZARDS IDENTIFICATION

**PHYSICAL HAZARDS:** Not classified.

**HEALTH HAZARDS:** Not classified.

**ENVIRONMENTAL HAZARDS:** Not classified.

**OSHA DEFINED HAZARDS:** Not classified.

**LABEL ELEMENTS:**

**SIGNAL WORD:** Not applicable.

**HAZARD STATEMENTS:** Not applicable.

**PREVENTION:** Not applicable.

**RESPONSE:** Not applicable.

**STORAGE:** Not applicable.

**DISPOSAL:** Not applicable.

**HAZARDS NOT OTHERWISE  
CLASSIFIED (HNOC):** See Section 11

**ADDITIONAL INFORMATION:** None.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### SUBSTANCES

| CHEMICAL NAME                             | CAS NUMBER | %    |
|---|------------|------|
| Hydrotreated Heavy Paraffinic Distillates | 64742-65-0 | > 99 |
| Zinc Dialkyldithiophosphate Additive      | 68649-42-3 | < 1  |

### SECTION 4: FIRST AID MEASURES

#### DESCRIPTION OF NECESSARY FIRST AID MEASURES

**EYE CONTACT:** Flush eyes with large amounts of water for 15 minutes. If eye irritation develops or persists get medical help.

**SKIN CONTACT:** Remove contaminated clothing. Wash affected area with a waterless hand cleaner, and/or soap and water. If irritation persists, consult a physician.

**INHALATION:** Remove to fresh air. Get medical attention if symptoms persist.

**ASPIRATION:** If there is any suspicion of aspiration into the lungs obtain medical advice.

**INGESTION:** If the material is swallowed, get immediate medical attention—Do not induce vomiting.

**NOTES TO PHYSICIAN:** This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

### SECTION 5: FIRE-FIGHTING MEASURES

**FLASH POINT:** > 420 °F

**FLASH POINT METHOD:** COC

**BURING RATE:** Not determined.

**LOWER FLAMMABLE LIMIT (LFL):** Not determined.

**UPPER FLAMMABLE LIMIT (UFL):** Not determined.

**FLAMMABILITY CLASSIFICATION:** Not determined.

**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide, water fog. Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.

**GENERAL FIRE HAZARDS:** Fire and explosion hazards are moderate when this product is exposed to heat or flame

**HAZARDOUS COMBUSTION PROCEDURES:** Carbon monoxide and carbon dioxide. Decomposition of this product may yield oxides of sulfur and nitrogen. Decomposition of this product may yield oxides of phosphorus.

**FIRE-FIGHTING EQUIPMENT/INSTRUCTION:** Do not point solid water stream directly into burning oil to avoid spreading. Wear full set of protective equipment including chemical goggles and gloves.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**CONTAINMENT PROCEDURES:** Contain the discharge material. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

**CLEAN-UP PROCEDURES:** Absorb with inert absorbent such as dry clay, sand, or diatomaceous earth. Scoop up used absorbent into drums. Dispose of spent absorbent in an approved industrial waste landfill. Do not allow the spilled product to enter public drainage system or open water courses. Thoroughly wash the area after a spill or leak clean-up.

**EVACUATION PROCEDURES:** Isolate area. Keep unnecessary personnel away.

## SECTION 6: ACCIDENTAL RELEASE MEASURES (CONTINUED)

**SPECIAL INSTRUCTIONS:** Wear appropriate protective equipment and clothing during clean-up. Surfaces may become slippery after spillage.

**SPILL TO NAVIGABLE WATERS:** If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the Nation Response Center.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR HANDLING:** Avoid getting this material into contact with your skin and eyes. Avoid the generation of oil mists. Wash hands after handling and before eating. Keep this product from heat, sparks, or flames.

**RECOMMENDED STORAGE METHODS:** Keep the container tightly closed and in a cool, well-ventilated place. When using this material, do not eat, drink or smoke. Do not store this material in open or unlabeled containers. Store away from strong oxidizers.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMITS

#### U.S. OSHA TABLE Z-1 LIMITS FOR AIR CONTAMINANTS (29 CFR 1910.1000)

| COMPONENTS                                | TYPE | VALUE               | FORM  |
|---|------|---------------------|-------|
| Distillates (Petroleum)<br>CAS 64742-65-0 | PEL  | 5 mg/m <sup>3</sup> | Mist. |

#### U.S. ACGIH THRESHOLD LIMIT VALUES

| MATERIAL | TYPE | VALUE               | FORM  |
|----------|------|---------------------|-------|
| Base Oil | TWA  | 5 mg/m <sup>3</sup> | Mist. |

#### U.S. NIOSH

##### (POCKET GUIDE TO CHEMICAL HAZARDS):

| MATERIAL                                  | TYPE | VALUE                | FORM  |
|---|------|----------------------|-------|
| Base Oil                                  | STEL | 10 mg/m <sup>3</sup> | Mist. |
|   | TWA  | 5 mg/m <sup>3</sup>  | Mist. |
| COMPONENTS                                | TYPE | VALUE                | FORM  |
| Distillates (Petroleum)<br>CAS 64742-65-0 | STEL | 10 mg/m <sup>3</sup> | Mist. |
|   | TWA  | 5 mg/m <sup>3</sup>  | Mist. |

**BIOLOGICAL LIMIT VALUES:** No biological limits noted for the ingredient(s).

**ENGINEERING CONTROLS:** Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

**EYE/FACE PROTECTION:** Wear chemical goggles or a full face shield.

**SKIN PROTECTION** Use impervious gloves for prolonged contact. Wear oil-impervious garments if contact is unavoidable. The use of neoprene gloves is recommended.

**RESPIRATORY PROTECTION:** If workplace exposure limit is exceeded use NIOSH-approved disposable dust/mist mask breathing apparatus for entry into confined space in the absence of proper environmental control.

**GENERAL:** Use good hygiene when handling petroleum product.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Clear & Bright.

PHYSICAL STATE: Liquid.  
COLOR: Light Amber to Amber.  
FORM: Liquid.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

ODOR: Hydrocarbon-like.  
ODOR THRESHOLD: Not available.  
pH: Not applicable.  
VISCOSITY AT 100 °F, SUS: 158  
GRAVITY, °API: 32.6  
SOLUBILITY IN WATER: No  
FLASH POINT °F: 420 °F  
BOILING POINT °F: NA  
POUR POINT °F: -15  
VAPOR PRESSURE (MM HG 20C): NA  
EVAPORATION RATE: Not available.  
VAPOR DENSITY: Not available.  
RELATIVE DENSITY: 0.86  
RELATIVE DENSITY TEMPERATURE: 60° F (15.56° C)  
ASTM D-4052/ISO 12185  
FLAMMABILITY (SOLID,GAS): Not available.  
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS  
FLAMMABILITY LIMIT-LOWER (%): Not available.  
FLAMMABILITY LIMIT-UPPER (%): Not available.  
EXPLOSIVE LIMIT-LOWER (%): Not available.  
EXPLOSIVE LIMIT-UPPER (%): Not available.  
PARTITION COEFFICIENT (N-OCTANOL/WATER): Not established.  
AUTO-IGNITION TEMPERATURE: > 600 °F (> 315.56 °C) ASTM E-659  
DECOMPOSITION TEMPERATURE: Not available.

## SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.  
HAZARDOUS POLYMERIZATION: Hazard polymerization will not occur.  
CHEMICAL INCOMPATIBILITIES: This product may react with strong oxidizing agents.  
CONDITIONS TO AVOID (STABILITY): High temperatures and open flames.  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, Carbon monoxide, Oxides of sulfur and nitrogen.

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/ TARGET ORGAN INFORMATION:

GENERAL PRODUCT/  
COMPONENT INFORMATION: Product may be irritating to the skin, eyes, and respiratory system. Repeated skin contact with this product may cause dermatitis or an oil acne. Excessive inhalation of oil mist may cause accumulation of mineral oil in the lungs accompanied by pulmonary fibrosis.

COMPONENT LD50/LC50: No data available for product.

EPIDEMIOLOGY: No data available for product.

### CARCINOGENICITY:

GENERAL PRODUCT/  
COMPONENT INFORMATION: No data available on the product as a whole. Prolonged and repeated skin contact with some mildly treated or untreated mineral oils have produced skin cancer in laboratory animals. Note

that USED oils tend to contain higher amounts of the cancer-causing aromatics, which have been linked to scrotal and lung cancer in humans.

## SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

|  |   |
|--|---|
| <b>COMPONENT CARCINOGENICITY LISTING:</b>    | None of this product's components are listed by ACGIH, IARC, NIOSH, NTP or OSHA.  |
| <b>TERATOGENICITY/ REPRODUCTIVE EFFECTS:</b> | No data available for the product as a whole.   |
| <b>NEUROTOXICITY:</b>                        | High vapor/aerosol concentrations (attainable only at elevated temperatures) may cause central nervous system effects such as dizziness, drowsiness or headaches. |
| <b>MUTAGENICITY:</b>                         | No data available on this product as a whole.   |
| <b>OTHER INFORMATION:</b>                    | No information available.   |

## SECTION 12: ECOLOGICAL INFORMATION

|                            |   |
|----------------------------|---|
| <b>ECOTOXICITY:</b>        | No information is available on ecotoxicity of this product. Keep product out of sewers and waterways. |
| <b>ENVIRONMENTAL FATE:</b> | No information is available.  |

## SECTION 13: DISPOSAL CONSIDERATIONS

### U.S. EPA WASTE NUMBER & DESCRIPTIONS

|                                     |  |
|-------------------------------------|--|
| <b>GENERAL PRODUCT INFORMATION:</b> | Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. All waste must be handled in accordance with local, state, and federal governments. |
| <b>COMPONENT WASTE NUMBERS:</b>     | No EPA Waste Numbers are applicable for this product's components  |
| <b>DISPOSAL INSTRUCTIONS:</b>       | Dispose of waste material according to Local, State, Federal, and Provincial Environment Regulation.   |

## SECTION 14: TRANSPORT INFORMATION

|  |                                      |
|--|--------------------------------------|
| <b>PROPER SHIPPING NAME:</b>                     | Not regulated as hazardous material. |
| <b>HAZARD CLASS:</b>                             | Not regulated.                       |
| <b>DOT ID NO.:</b>                               | Not regulated.                       |
| <b>PACKING GROUP:</b>                            | Not regulated.                       |
| <b>DOT SHIPPING LABEL:</b>                       | None required.                       |
| <b>ADDITIONAL SHIPPING INFORMATION:</b>          | Not regulated.                       |
| <b>INTERNATIONAL TRANSPORTATION REGULATIONS:</b> | Not regulated as dangerous goods.    |

## SECTION 15: REGULATORY INFORMATION

|  |  |
|--|--|
| <b><u>U.S. FEDERAL REGULATIONS:</u></b>  | This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. |
| <b>CERCLA/SARA HAZARDOUS SUBSTANCES:</b> | Not applicable.  |

TSCA 12(b) EXPORT NOTIFICATION (40 CFR 707, SUBPT. D): Not regulated.  
 CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4): Not listed.  
 U.S. OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050): Not listed.

## SECTION 15: REGULATORY INFORMATION (CONTINUED)

### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986

(SARA) HAZARD CATEGORIES: Immediate Hazard Yes  
 – No  
 Delayed Hazard – No  
 Fire Hazard – No  
 Pressure Hazard – No  
 Reactivity Hazard –  
 SARA 302 EXTREMELY HAZARDOUS SUBSTANCE: Not listed.  
 SARA 311-312 HAZARDOUS CHEMICAL: Yes.  
 SARA 313 (TRI REPORTING): Not regulated.

### OTHER FEDERAL REGULATIONS

CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPs) LIST: Not regulated.  
 CLEAN AIR ACT (CAA) SECTION 112(R) ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130): Not regulated.  
 SAFE DRINKING WATER ACT (SDWA): Not regulated.

U.S. STATE REGULATIONS: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

U.S. MASSACHUSETTS RTK – SUBSTANCE LIST: Not regulated.  
 U.S. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT: Not regulated.  
 U.S. PENNSYLVANIA RTK – HAZARDOUS SUBSTANCES: Not regulated.  
 U.S. RHODE ISLAND RTK: Not regulated.  
 U.S. CALIFORNIA PROPOSITION 65: Not listed.

### INTERNATIONAL INVENTORIES:

| COUNTRY(S) OR REGION          | INVENTORY NAME   | ON INVENTORY (YES/NO)* |
|-------------------------------|--|------------------------|
| Australia                     | Australian Inventory of Chemical Substances (AICS)   | Yes                    |
| Canada                        | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)  | Yes<br>No              |
| China                         | Inventory of Existing Chemical Substances in China   | Yes                    |
| Europe                        | European Inventory of Existing Commercial Chemical Substances<br>European List of Notified Chemical Substances | Yes<br>No              |
| Japan                         | Inventory of Existing and New Chemical Substances  | Yes                    |
| Korea                         | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                   | New Zealand Inventory  | Yes                    |
| Philippines                   | Philippine Inventory of Chemicals and Chemical Substances  | Yes                    |
| United States and Puerto Rico | Toxic Substances Control Act (TSCA) Inventory  | Yes                    |

\* **"Yes"** indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

**"No"** indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## SECTION 16: OTHER INFORMATION

### HAZARDOUS MATERIAL INFORMATION SYSTEM (U.S.A.)

Health: 1

Flammability: 1

Reactivity: 0

### NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)

Health: 0

Flammability: 1

Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE-Personal Protection Equipment Index recommendation, \*- Chronic Effect Indication). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

### HISTORY

DATE ISSUE (MM/DD/YYYY): 03/04/2015

### **KEY TO ABBREVIATIONS:**

ATE = Acute Toxicity Estimate  
BCF = Bio-concentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Code  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### **NOTICE TO THE READER:**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Liquid Wrench Silicone Spray - WERCS

### Other means of identification

**SDS number** M914 - WERCS  
**Part No.** M914, M914/6, M914/4  
**Tariff code** 3403.19.1000

**Recommended use** Lubricant


**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** RSC Chemical Solutions  
**Address** 600 Radiator Road  
Indian Trail, NC 28079  
United States  
**Telephone** Customer Service: (704) 821-7643  
Technical: (704) 684-1811  
**Website** www.rscbrands.com  
**E-mail** sds@rscbrands.com  
**Emergency phone number** Emergency Telephone: (303) 623-5716  
Emergency Contact: RMPDC (877) 740-5015

## 2. Hazard(s) identification

|                              |   |                             |
|------------------------------|---|-----------------------------|
| <b>Physical hazards</b>      | Flammable aerosols  | Category 2                  |
|                              | Gases under pressure  | Compressed gas              |
| <b>Health hazards</b>        | Skin corrosion/irritation   | Category 2                  |
|                              | Serious eye damage/eye irritation   | Category 2A                 |
|                              | Specific target organ toxicity, single exposure                                     | Category 3 narcotic effects |
|                              | Aspiration hazard   | Category 1                  |
| <b>Environmental hazards</b> | Not classified.   |                             |
| <b>OSHA defined hazards</b>  | Not classified.   |                             |
| <b>Label elements</b>        |  |                             |

**Signal word** Danger

**Hazard statement** Flammable aerosol. Contains gas under pressure; may explode if heated. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

### Precautionary statement

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.

**Response** If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

|  |  |
|--|--|
| <b>Storage</b>                                   | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | Combustible. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.   |
| <b>Supplemental information</b>                  | 79.43% of the mixture consists of component(s) of unknown acute oral toxicity. 83.17% of the mixture consists of component(s) of unknown acute dermal toxicity. 51.73% of the mixture consists of component(s) of unknown acute inhalation toxicity. 38.33% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 19.36% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name  | Common name and synonyms | CAS number | %         |
|--|--------------------------|------------|-----------|
| Distillates (petroleum), Hydrotreated Light            |                          | 64742-47-8 | 10 - < 20 |
| Naphtha (petroleum), Hydrotreated Heavy                |                          | 64742-48-9 | 10 - < 20 |
| Solvent Naphtha (petroleum), Medium Aliph.             |                          | 64742-88-7 | 10 - < 20 |
| Stoddard Solvent                                       |                          | 8052-41-3  | 10 - < 20 |
| Dimethylpolysiloxane                                   |                          | 63148-62-9 | 5 - < 10  |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic |                          | 64742-52-5 | 5 - < 10  |
| 1,2,4-Trimethylbenzene                                 |                          | 95-63-6    | 1 - < 3   |
| BENZENE, DIMETHYL                                      |                          | 1330-20-7  | 1 - < 3   |
| BENZENE, METHYL-                                       |                          | 108-88-3   | 1 - < 3   |
| BENZENE,1-METHYLETHYL-                                 |                          | 98-82-8    | 1 - < 3   |
| Carbon Dioxide   |                          | 124-38-9   | 1 - < 3   |
| Corrosion Inhibitor                                    |                          | Mixture    | 1 - < 3   |
| ETHYLBENZENE   |                          | 100-41-4   | 1 - < 3   |
| HEXANE   |                          | 110-54-3   | 1 - < 3   |
| Nonane   |                          | 111-84-2   | 1 - < 3   |
| Trimethylbenzene                                       |                          | 25551-13-7 | 1 - < 3   |
| BENZENE  |                          | 71-43-2    | < 0.3     |
| NAPHTHALENE  |                          | 91-20-3    | < 0.3     |
| Other components below reportable levels               |                          |            | 1 - < 3   |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>  | Not likely, due to the form of the product. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

## 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.  |
| <b>General fire hazards</b>  | Flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame. Combustible.   |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will spread on the water surface. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  |
| <b>Environmental precautions</b>   | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.<br>Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.  |

## 7. Handling and storage

### Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect containers from physical damage; do not drag, roll, slide, or drop. When moving containers, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport containers. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Components            | Type | Value |
|-----------------------|------|-------|
| BENZENE (CAS 71-43-2) | STEL | 5 ppm |
|                       | TWA  | 1 ppm |

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components  | Type | Value      | Form  |
|---|------|------------|-------|
| BENZENE, DIMETHYL (CAS 1330-20-7)                                       | PEL  | 435 mg/m3  |       |
| BENZENE, 1-METHYLETHYL- (CAS 98-82-8)                                   | PEL  | 100 ppm    |       |
|   |      | 245 mg/m3  |       |
| Carbon Dioxide (CAS 124-38-9)   | PEL  | 50 ppm     |       |
|   |      | 9000 mg/m3 |       |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | PEL  | 5000 ppm   | Mist. |
|   |      | 5 mg/m3    |       |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)            | PEL  | 2000 mg/m3 |       |
|   |      | 500 ppm    |       |
|   |      | 400 mg/m3  |       |

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components   | Type | Value                 | Form |
|--|------|-----------------------|------|
| ETHYLBENZENE (CAS 100-41-4)                              | PEL  | 100 ppm<br>435 mg/m3  |      |
| HEXANE (CAS 110-54-3)                                    | PEL  | 100 ppm<br>1800 mg/m3 |      |
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9) | PEL  | 500 ppm<br>400 mg/m3  |      |
| NAPHTHALENE (CAS 91-20-3)                                | PEL  | 100 ppm<br>50 mg/m3   |      |
| Stoddard Solvent (CAS 8052-41-3)                         | PEL  | 10 ppm<br>2900 mg/m3  |      |
|  |      | 500 ppm               |      |

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

| Components                      | Type    | Value   |
|---------------------------------|---------|---------|
| BENZENE (CAS 71-43-2)           | Ceiling | 25 ppm  |
|                                 | TWA     | 10 ppm  |
| BENZENE, METHYL- (CAS 108-88-3) | Ceiling | 300 ppm |
|                                 | TWA     | 200 ppm |

**US. ACGIH Threshold Limit Values**

| Components  | Type | Value     | Form                |
|---|------|-----------|---------------------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)                                    | TWA  | 25 ppm    |                     |
| BENZENE (CAS 71-43-2)   | STEL | 2.5 ppm   |                     |
|   | TWA  | 0.5 ppm   |                     |
| BENZENE, DIMETHYL (CAS 1330-20-7)                                       | STEL | 150 ppm   |                     |
|   | TWA  | 100 ppm   |                     |
| BENZENE, METHYL- (CAS 108-88-3)   | TWA  | 20 ppm    |                     |
| BENZENE, 1-METHYLETHYL- (CAS 98-82-8)                                   | TWA  | 50 ppm    |                     |
| Carbon Dioxide (CAS 124-38-9)   | STEL | 30000 ppm |                     |
|   | TWA  | 5000 ppm  |                     |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | TWA  | 5 mg/m3   | Inhalable fraction. |
| ETHYLBENZENE (CAS 100-41-4)   | TWA  | 20 ppm    |                     |
| HEXANE (CAS 110-54-3)   | TWA  | 50 ppm    |                     |
| NAPHTHALENE (CAS 91-20-3)   | TWA  | 10 ppm    |                     |
| Nonane (CAS 111-84-2)   | TWA  | 200 ppm   |                     |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)             | TWA  | 200 mg/m3 | Non-aerosol.        |
| Stoddard Solvent (CAS 8052-41-3)  | TWA  | 100 ppm   |                     |
| Trimethylbenzene (CAS 25551-13-7)                                       | TWA  | 25 ppm    |                     |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                           | Type | Value     | Form |
|--------------------------------------|------|-----------|------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6) | TWA  | 125 mg/m3 |      |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components  | Type    | Value       | Form  |
|---|---------|-------------|-------|
| BENZENE (CAS 71-43-2)   | STEL    | 25 ppm      | Mist. |
|   | TWA     | 1 ppm       |       |
|   | STEL    | 0.1 ppm     |       |
| BENZENE, METHYL- (CAS 108-88-3)   | STEL    | 560 mg/m3   |       |
|   | TWA     | 150 ppm     |       |
|   | TWA     | 375 mg/m3   |       |
| BENZENE,1-METHYLETHY L- (CAS 98-82-8)                                   | TWA     | 100 ppm     |       |
|   | TWA     | 245 mg/m3   |       |
|   | STEL    | 50 ppm      |       |
| Carbon Dioxide (CAS 124-38-9)   | STEL    | 54000 mg/m3 |       |
|   | TWA     | 30000 ppm   |       |
|   | TWA     | 9000 mg/m3  |       |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | Ceiling | 5000 ppm    |       |
|   | Ceiling | 1800 mg/m3  |       |
|   | STEL    | 10 mg/m3    |       |
| ETHYLBENZENE (CAS 100-41-4)   | STEL    | 545 mg/m3   |       |
|   | TWA     | 125 ppm     |       |
|   | TWA     | 435 mg/m3   |       |
| HEXANE (CAS 110-54-3)   | TWA     | 100 ppm     |       |
|   | TWA     | 180 mg/m3   |       |
|   | TWA     | 50 ppm      |       |
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)                | TWA     | 400 mg/m3   |       |
|   | STEL    | 100 ppm     |       |
|   | STEL    | 75 mg/m3    |       |
| NAPHTHALENE (CAS 91-20-3)   | TWA     | 15 ppm      |       |
|   | TWA     | 50 mg/m3    |       |
|   | TWA     | 10 ppm      |       |
| Nonane (CAS 111-84-2)   | TWA     | 1050 mg/m3  |       |
|   | TWA     | 200 ppm     |       |
|   | TWA     | 100 mg/m3   |       |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)             | TWA     | 100 mg/m3   |       |
|   | Ceiling | 1800 mg/m3  |       |
|   | TWA     | 350 mg/m3   |       |
| Stoddard Solvent (CAS 8052-41-3)  | Ceiling | 1800 mg/m3  |       |
|   | TWA     | 350 mg/m3   |       |

**Biological limit values**
**ACGIH Biological Exposure Indices**

| Components                        | Value     | Determinant                                   | Specimen            | Sampling Time |
|-----------------------------------|-----------|---|---------------------|---------------|
| BENZENE (CAS 71-43-2)             | 25 µg/g   | S-Phenylmercapturic acid                      | Creatinine in urine | *             |
| BENZENE, DIMETHYL (CAS 1330-20-7) | 1.5 g/g   | Methylhippuric acids                          | Creatinine in urine | *             |
| BENZENE, METHYL- (CAS 108-88-3)   | 0.3 mg/g  | o-Cresol, with hydrolysis                     | Creatinine in urine | *             |
|                                   | 0.03 mg/l | Toluene                                       | Urine               | *             |
|                                   | 0.02 mg/l | Toluene                                       | Blood               | *             |
| ETHYLBENZENE (CAS 100-41-4)       | 0.15 g/g  | Sum of mandelic acid and phenylglyoxylic acid | Creatinine in urine | *             |

**ACGIH Biological Exposure Indices**

| Components            | Value    | Determinant                         | Specimen | Sampling Time |
|-----------------------|----------|-------------------------------------|----------|---------------|
| HEXANE (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedione, without hydrolysis | Urine    | *             |

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE (CAS 71-43-2)                | Can be absorbed through the skin. |
| BENZENE, METHYL- (CAS 108-88-3)      | Can be absorbed through the skin. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
| HEXANE (CAS 110-54-3)                | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3)            | Can be absorbed through the skin. |

**US - Minnesota Haz Subs: Skin designation applies**

|                                      |                           |
|--------------------------------------|---------------------------|
| BENZENE, METHYL- (CAS 108-88-3)      | Skin designation applies. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Skin designation applies. |

**US - Tennessee OELs: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**US ACGIH Threshold Limit Values: Skin designation**

|   |                                   |
|---|-----------------------------------|
| BENZENE (CAS 71-43-2)                                       | Can be absorbed through the skin. |
| HEXANE (CAS 110-54-3)                                       | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3)                                   | Can be absorbed through the skin. |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7) | Can be absorbed through the skin. |

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Not available.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

|  |                             |
|--|-----------------------------|
| <b>Appearance</b>                              | Clear. Liquid               |
| <b>Physical state</b>                          | Liquid.                     |
| <b>Form</b>                                    | Aerosol. Compressed gas.    |
| <b>Color</b>                                   | Pale yellow                 |
| <b>Odor</b>                                    | Petroleum                   |
| <b>Odor threshold</b>                          | Not available.              |
| <b>pH</b>                                      | Not available.              |
| <b>Melting point/freezing point</b>            | -94 °F (-70 °C) estimated   |
| <b>Initial boiling point and boiling range</b> | 314.6 °F (157 °C) estimated |

|   |                              |
|---|------------------------------|
| <b>Flash point</b>                                  | 117.0 °F (47.2 °C)           |
| <b>Evaporation rate</b>                             | Not available.               |
| <b>Flammability (solid, gas)</b>                    | Not applicable.              |
| <b>Upper/lower flammability or explosive limits</b> |                              |
| <b>Flammability limit - lower (%)</b>               | 0.7 % estimated              |
| <b>Flammability limit - upper (%)</b>               | 6 % estimated                |
| <b>Explosive limit - lower (%)</b>                  | Not available.               |
| <b>Explosive limit - upper (%)</b>                  | Not available.               |
| <b>Vapor pressure</b>                               | 0.26 hPa estimated           |
| <b>Vapor density</b>                                | Not available.               |
| <b>Relative density</b>                             | Not available.               |
| <b>Solubility(ies)</b>                              |                              |
| <b>Solubility (water)</b>                           | Insoluble                    |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.               |
| <b>Auto-ignition temperature</b>                    | 229 °F (109.44 °C) estimated |
| <b>Decomposition temperature</b>                    | Not available.               |
| <b>Viscosity</b>                                    | Not available.               |
| <b>Other information</b>                            |                              |
| <b>Density</b>                                      | 6.80 lbs/gal                 |
| <b>Explosive properties</b>                         | Not explosive.               |
| <b>Flame extension</b>                              | 25 in                        |
| <b>Flammability (flash back)</b>                    | No                           |
| <b>Flammability class</b>                           | Flammable IC estimated       |
| <b>Heat of combustion (NFPA 30B)</b>                | 32.78 kJ/g estimated         |
| <b>Moisture</b>                                     | < 0.03 %                     |
| <b>Oxidizing properties</b>                         | Not oxidizing.               |
| <b>Percent volatile</b>                             | 5.23 % estimated             |
| <b>Refractive index</b>                             | 1.44                         |
| <b>Specific gravity</b>                             | 0.82                         |
| <b>VOC</b>  | 58.5 % w/w                   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.      |
| <b>Incompatible materials</b>             | Strong acids. Strong oxidizing agents. Halogens.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.                   |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |

**Symptoms related to the physical, chemical and toxicological characteristics**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity** May be fatal if swallowed and enters airways.

| Components                            | Species | Test Results      |
|---------------------------------------|---------|-------------------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)  |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| LD50                                  | Rabbit  | > 3160 mg/kg      |
| BENZENE, DIMETHYL (CAS 1330-20-7)     |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 3523 - 8600 mg/kg |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8)  |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 1400 mg/kg        |
| Dimethylpolysiloxane (CAS 63148-62-9) |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| <i>Liquid</i>                         |         |                   |
| LD50                                  | Rabbit  | > 2000 mg/kg      |
| ETHYLBENZENE (CAS 100-41-4)           |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 3500 mg/kg        |
| NAPHTHALENE (CAS 91-20-3)             |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| LD50                                  | Rabbit  | > 2 g/kg          |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 490 mg/kg         |

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Risk of cancer cannot be excluded with prolonged exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

|                                      |   |
|--------------------------------------|---|
| BENZENE (CAS 71-43-2)                | 1 Carcinogenic to humans.                           |
| BENZENE, DIMETHYL (CAS 1330-20-7)    | 3 Not classifiable as to carcinogenicity to humans. |
| BENZENE, METHYL- (CAS 108-88-3)      | 3 Not classifiable as to carcinogenicity to humans. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | 2B Possibly carcinogenic to humans.                 |
| ETHYLBENZENE (CAS 100-41-4)          | 2B Possibly carcinogenic to humans.                 |
| NAPHTHALENE (CAS 91-20-3)            | 2B Possibly carcinogenic to humans.                 |
| Stoddard Solvent (CAS 8052-41-3)     | 3 Not classifiable as to carcinogenicity to humans. |

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

|                       |        |
|-----------------------|--------|
| BENZENE (CAS 71-43-2) | Cancer |
|-----------------------|--------|

## US. National Toxicology Program (NTP) Report on Carcinogens

BENZENE (CAS 71-43-2)

Known To Be Human Carcinogen.

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Reasonably Anticipated to be a Human Carcinogen.

NAPHTHALENE (CAS 91-20-3)

Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components   | Species | Test Results  |
|--|---------|---|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)                         |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 7.19 - 8.28 mg/l, 96 hours               |
| BENZENE (CAS 71-43-2)  |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 8.76 - 15.6 mg/l, 48 hours                         |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 7.2 - 11.7 mg/l, 96 hours |
| BENZENE, DIMETHYL (CAS 1330-20-7)                            |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Bluegill (Lepomis macrochirus) 7.711 - 9.591 mg/l, 96 hours                   |
| BENZENE, METHYL- (CAS 108-88-3)                              |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours                         |
| Fish   | LC50    | Coho salmon,silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours          |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8)                         |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Brine shrimp (Artemia sp.) 3.55 - 11.29 mg/l, 48 hours                        |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours        |
| Dimethylpolysiloxane (CAS 63148-62-9)                        |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Channel catfish (Ictalurus punctatus) 2.36 - 4.15 mg/l, 96 hours              |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours                           |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours        |
| ETHYLBENZENE (CAS 100-41-4)                                  |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 1.37 - 4.4 mg/l, 48 hours                          |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 7.5 - 11 mg/l, 96 hours                  |
| HEXANE (CAS 110-54-3)  |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours             |

| Components   |      | Species   | Test Results               |
|--|------|---|----------------------------|
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9) |      |   |                            |
| Aquatic  |      |   |                            |
| Crustacea  | EC50 | Water flea (Daphnia pulex)                          | 2.7 - 5.1 mg/l, 48 hours   |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours         |
|  |      |   | 8.8 mg/l, 96 hours         |
| NAPHTHALENE (CAS 91-20-3)                                |      |   |                            |
| Aquatic  |      |   |                            |
| Crustacea  | EC50 | Water flea (Daphnia magna)                          | 1.09 - 3.4 mg/l, 48 hours  |
| Fish   | LC50 | Pink salmon (Oncorhynchus gorbuscha)                | 1.11 - 1.68 mg/l, 96 hours |

\* Estimates for product may be based on additional component data not shown.

## Persistence and degradability

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

|                        |             |
|------------------------|-------------|
| BENZENE                | 2.13        |
| BENZENE, DIMETHYL      | 3.12 - 3.2  |
| BENZENE, METHYL-       | 2.73        |
| BENZENE,1-METHYLETHYL- | 3.66        |
| ETHYLBENZENE           | 3.15        |
| HEXANE                 | 3.9         |
| NAPHTHALENE            | 3.3         |
| Nonane                 | 5.46        |
| Stoddard Solvent       | 3.16 - 7.15 |

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

## 13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.              |

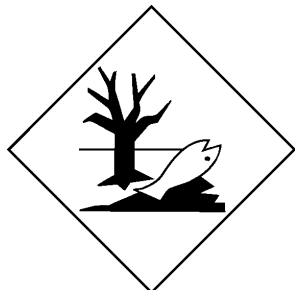
## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, Flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not available.  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | 8, 146, 335, IB3, T4, TP1, TP29   |
| <b>Packaging exceptions</b>         | 155   |
| <b>Packaging non bulk</b>           | 203   |
| <b>Packaging bulk</b>               | 241   |

### IATA

|                                |                    |
|--------------------------------|--------------------|
| <b>UN number</b>               | UN1950             |
| <b>UN proper shipping name</b> | Aerosol, flammable |

**Transport hazard class(es)****Class** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards** Yes**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IMDG****UN number** UN1950**UN proper shipping name** Aerosols**Transport hazard class(es)****Class** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards****Marine pollutant** No**EmS** F-D, S-U**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to** Not established.**Annex II of MARPOL 73/78 and  
the IBC Code****DOT****IATA; IMDG****Marine pollutant****General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Nonane (CAS 111-84-2)

1.0 % One-Time Export Notification only.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE (CAS 71-43-2)

Listed.

BENZENE, DIMETHYL (CAS 1330-20-7)

Listed.

BENZENE, METHYL- (CAS 108-88-3)

Listed.

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Listed.

ETHYLBENZENE (CAS 100-41-4)

Listed.

HEXANE (CAS 110-54-3)

Listed.

NAPHTHALENE (CAS 91-20-3)

Listed.

Nonane (CAS 111-84-2)

Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

BENZENE (CAS 71-43-2)

Cancer

Central nervous system

Blood

Aspiration

Skin

Eye

respiratory tract irritation

Flammability

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### Hazard categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - Yes

Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

No

#### SARA 313 (TRI reporting)

| Chemical name          | CAS number | % by wt. |
|------------------------|------------|----------|
| 1,2,4-Trimethylbenzene | 95-63-6    | 1 - < 3  |
| BENZENE                | 71-43-2    | < 0.3    |
| BENZENE, DIMETHYL      | 1330-20-7  | 1 - < 3  |
| BENZENE, METHYL-       | 108-88-3   | 1 - < 3  |
| BENZENE,1-METHYLETHYL- | 98-82-8    | 1 - < 3  |
| ETHYLBENZENE           | 100-41-4   | 1 - < 3  |
| HEXANE                 | 110-54-3   | 1 - < 3  |
| NAPHTHALENE            | 91-20-3    | < 0.3    |

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

BENZENE (CAS 71-43-2)

BENZENE, DIMETHYL (CAS 1330-20-7)

BENZENE, METHYL- (CAS 108-88-3)

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

ETHYLBENZENE (CAS 100-41-4)

HEXANE (CAS 110-54-3)

NAPHTHALENE (CAS 91-20-3)

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

BENZENE, METHYL- (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

BENZENE, METHYL- (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

BENZENE, METHYL- (CAS 108-88-3) 594

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

BENZENE (CAS 71-43-2) Listed: February 27, 1987

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Listed: April 6, 2010

ETHYLBENZENE (CAS 100-41-4) Listed: June 11, 2004

NAPHTHALENE (CAS 91-20-3) Listed: April 19, 2002

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

BENZENE (CAS 71-43-2) Listed: December 26, 1997

BENZENE, METHYL- (CAS 108-88-3) Listed: January 1, 1991

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

BENZENE (CAS 71-43-2) Listed: December 26, 1997

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1,2,4-Trimethylbenzene (CAS 95-63-6)

BENZENE (CAS 71-43-2)

BENZENE, DIMETHYL (CAS 1330-20-7)

BENZENE, METHYL- (CAS 108-88-3)

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

ETHYLBENZENE (CAS 100-41-4)

HEXANE (CAS 110-54-3)

Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)

NAPHTHALENE (CAS 91-20-3)

Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)

Stoddard Solvent (CAS 8052-41-3)

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 08-29-2017

**Version #** 01

**HMIS® ratings** Health: 3  
Flammability: 4  
Physical hazard: 3

**NFPA ratings**

Health: 2  
Flammability: 3  
Instability: 3

**NFPA ratings****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



Revision Number: 006.0

Issue date: 11/02/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |  |                     |               |
|-------------------------------|--|---------------------|---------------|
| <b>Product name:</b>          | <b>LOCTITE 609 RETAINING COMPOUND</b>          | <b>IDH number:</b>  | 135512        |
|                               | <b>known as Loctite(R) 609 Retaining Compo</b> |                     |               |
| <b>Product type:</b>          | Anaerobic Adhesive                             | <b>Item number:</b> | 60931         |
| <b>Restriction of Use:</b>    | None identified                                | <b>Region:</b>      | United States |
| <b>Company address:</b>       | <b>Contact information:</b>                    |                     |               |
| Henkel Corporation            | Telephone: (860) 571-5100                      |                     |               |
| One Henkel Way                | MEDICAL EMERGENCY Phone: Poison Control Center |                     |               |
| Rocky Hill, Connecticut 06067 | 1-877-671-4608 (toll free) or 1-303-592-1711   |                     |               |
|                               | TRANSPORT EMERGENCY Phone: CHEMTREC            |                     |               |
|                               | 1-800-424-9300 (toll free) or 1-703-527-3887   |                     |               |
|                               | Internet: www.henkelna.com                     |                     |               |

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

| HAZARD CLASS                                       | HAZARD CATEGORY |
|--|-----------------|
| SKIN IRRITATION                                    | 2               |
| EYE IRRITATION                                     | 2A              |
| SKIN SENSITIZATION                                 | 1               |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | 2               |

### PICTOGRAM(S)



### Precautionary Statements

|                    |  |
|--------------------|--|
| <b>Prevention:</b> | Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.   |
| <b>Response:</b>   | IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. |
| <b>Storage:</b>    | Not prescribed   |
| <b>Disposal:</b>   | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.  |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s)      | CAS Number | Percentage* |
|-----------------------------|------------|-------------|
| 2-Hydroxyethyl methacrylate | 868-77-9   | 10 - 20     |
| Poly (ethyl methacrylate)   | 9003-42-3  | 1 - 5       |
| Cumene hydroperoxide        | 80-15-9    | 1 - 5       |
| Saccharin                   | 81-07-2    | 1 - 5       |
| Methacrylic acid            | 79-41-4    | 0.1 - 1     |
| Cumene                      | 98-82-8    | 0.1 - 1     |

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.                                      |
| <b>Skin contact:</b> | Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention. |
| <b>Eye contact:</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Ingestion:</b>    | Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.   |
| <b>Symptoms:</b>     | See Section 11.   |

### 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media:</b>               | Water spray (fog), foam, dry chemical or carbon dioxide.   |
| <b>Special firefighting procedures:</b>   | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.   |
| <b>Unusual fire or explosion hazards:</b> | Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers. In case of fire, keep containers cool with water spray. |
| <b>Hazardous combustion products:</b>     | Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.  |

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

|                                   |   |
|-----------------------------------|---|
| <b>Environmental precautions:</b> | Do not allow product to enter sewer or waterways.   |
| <b>Clean-up methods:</b>          | Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. |

## 7. HANDLING AND STORAGE

**Handling:** Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Refer to Section 8.

**Storage:** For safe storage, store at or below 38 °C (100.4 °F)  
Keep in a cool, well ventilated area away from heat, sparks and open flame.  
Keep container tightly closed until ready for use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous Component(s)      | ACGIH TLV  | OSHA PEL   | AIHA WEEL                                     | OTHER         |
|-----------------------------|------------|--|---|---------------|
| 2-Hydroxyethyl methacrylate | None       | None   | None  | 3 ppm Ceiling |
| Poly (ethyl methacrylate)   | None       | None   | None  | None          |
| Cumene hydroperoxide        | None       | None   | 1 ppm (6 mg/m <sup>3</sup> )<br>TWA<br>(SKIN) | None          |
| Saccharin                   | None       | None   | None  | None          |
| Methacrylic acid            | 20 ppm TWA | None   | None  | None          |
| Cumene                      | 50 ppm TWA | 50 ppm (245 mg/m <sup>3</sup> )<br>PEL<br>(SKIN) | None  | None          |

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:** Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

**Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves. Butyl rubber gloves. Natural rubber gloves. Glove recommendations are based upon permeation study results for similar products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Physical state:</b>                          | Liquid                                       |
| <b>Color:</b>                                   | Green  |
| <b>Odor:</b>                                    | Mild   |
| <b>Odor threshold:</b>                          | Not available.                               |
| <b>pH:</b>                                      | Not applicable                               |
| <b>Vapor pressure:</b>                          | < 5 mm hg (27 °C (80.6 °F))                  |
| <b>Boiling point/range:</b>                     | > 149 °C (> 300.2 °F)                        |
| <b>Melting point/ range:</b>                    | Not available.                               |
| <b>Specific gravity:</b>                        | 1.1  |
| <b>Vapor density:</b>                           | Not available.                               |
| <b>Flash point:</b>                             | > 93.3 °C (> 199.94 °F) Tagliabue closed cup |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.                               |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.                               |
| <b>Autoignition temperature:</b>                | Not available.                               |
| <b>Flammability:</b>                            | Not applicable                               |
| <b>Evaporation rate:</b>                        | Not available.                               |
| <b>Solubility in water:</b>                     | Slight                                       |
| <b>Partition coefficient (n-octanol/water):</b> | Not available.                               |
| <b>VOC content:</b>                             | 0.22 %; 2.46 g/l                             |

**Viscosity:** Not available.  
**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.

**Hazardous reactions:** None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.

**Hazardous decomposition products:** Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

**Incompatible materials:** Strong oxidizing agents.

**Reactivity:** Not available.

**Conditions to avoid:** Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

### Potential Health Effects/Symptoms

**Inhalation:** Inhalation of vapors or mists of the product may be irritating to the respiratory system.  
**Skin contact:** Causes skin irritation. May cause allergic skin reaction.  
**Eye contact:** Causes serious eye irritation.  
**Ingestion:** May cause gastrointestinal tract irritation if swallowed.

| Hazardous Component(s)      | LD50s and LC50s  | Immediate and Delayed Health Effects                           |
|-----------------------------|--|--|
| 2-Hydroxyethyl methacrylate | Oral LD50 (Mouse) = 3,275 mg/kg<br>Oral LD50 (Rat) = 11.2 g/kg<br>Oral LD50 (Rat) = 5,050 mg/kg  | Irritant, Allergen   |
| Poly (ethyl methacrylate)   | None   | Irritant   |
| Cumene hydroperoxide        | Inhalation LC50 (Mouse, 4 h) = 200 mg/l  | Allergen, Central nervous system, Corrosive, Irritant, Mutagen |
| Saccharin                   | Oral LD50 (Mouse) = 17 g/kg  | No Target Organs   |
| Methacrylic acid            | Oral LD50 (Mouse) = 1,332 mg/kg<br>Oral LD50 (Mouse) = 1,600 mg/kg<br>Oral LD50 (Mouse) = 1,250 mg/kg<br>Oral LD50 (Rabbit) = 1,200 mg/kg<br>Oral LD50 (Rat) = 1,060 mg/kg<br>Oral LD50 (Rat) = 2,224 mg/kg<br>Dermal LD50 (Rabbit) = 500 mg/kg<br>Inhalation LC50 (Rat, 4 h) = 7.1 mg/l | Corrosive, Irritant, Allergen                                  |
| Cumene                      | Oral LD50 (Rat) = 2.91 g/kg<br>Oral LD50 (Rat) = 1,400 mg/kg<br>Inhalation LC50 (Rat, 4 h) = 8000 ppm  | Central nervous system, Irritant, Lung                         |

| Hazardous Component(s)      | NTP Carcinogen                                      | IARC Carcinogen | OSHA Carcinogen<br>(Specifically Regulated) |
|-----------------------------|---|-----------------|---|
| 2-Hydroxyethyl methacrylate | No  | No              | No  |
| Poly (ethyl methacrylate)   | No  | No              | No  |
| Cumene hydroperoxide        | No  | No              | No  |
| Saccharin                   | No  | No              | No  |
| Methacrylic acid            | No  | No              | No  |
| Cumene                      | Reasonably Anticipated to be<br>a Human Carcinogen. | Group 2B        | No  |

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III  
DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

### International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

### Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

## 15. REGULATORY INFORMATION

### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.  
**TSCA 12 (b) Export Notification:** None above reporting de minimis  
**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Cumene hydroperoxide (CAS# 80-15-9). Saccharin (CAS# 81-07-2).  
**CERCLA Reportable quantity:** Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections: 2**

**Prepared by:** Product Safety and Regulatory Affairs

**Issue date:** 11/02/2017

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Revision Number: 001.1

Issue date: 10/28/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |  |                     |               |
|-------------------------------|--|---------------------|---------------|
| <b>Product name:</b>          | <b>Loctite® Extend® Rust Neutralizer</b>                     | <b>IDH number:</b>  | 633877        |
| <b>Product type:</b>          | Rust converter   | <b>Item number:</b> | 633877        |
| <b>Restriction of Use:</b>    | None identified  | <b>Region:</b>      | United States |
| <b>Company address:</b>       | <b>Contact information:</b>                                  |                     |               |
| Henkel Corporation            | Telephone: +1 (800) 624-7767                                 |                     |               |
| One Henkel Way                | MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-    |                     |               |
| Rocky Hill, Connecticut 06067 | 4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY       |                     |               |
|                               | Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 |                     |               |

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**DANGER:** EXTREMELY FLAMMABLE AEROSOL.  
HARMFUL IF SWALLOWED.  
CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE DAMAGE.  
MAY CAUSE DROWSINESS OR DIZZINESS.

| HAZARD CLASS                                     | HAZARD CATEGORY |
|--|-----------------|
| FLAMMABLE AEROSOL                                | 1               |
| ACUTE TOXICITY ORAL                              | 4               |
| SKIN IRRITATION                                  | 2               |
| SERIOUS EYE DAMAGE                               | 1               |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE | 3               |

### PICTOGRAM(S)



### Precautionary Statements

|                    |   |
|--------------------|---|
| <b>Prevention:</b> | Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing mist or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye and face protection. Wear protective gloves.  |
| <b>Response:</b>   | If SWALLOWED: Immediately call poison control or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. Rinse mouth. If skin irritation occurs: Get medical attention. Take off contaminated clothing. |
| <b>Storage:</b>    | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |
| <b>Disposal:</b>   | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.   |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s)   | CAS Number | Percentage* |
|--|------------|-------------|
| Acetone  | 67-64-1    | 30 - 60     |
| 2-Butoxyethanol  | 111-76-2   | 10 - 30     |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | 27360-07-2 | 1 - 5       |
| Formic acid  | 64-18-6    | 1 - 5       |
| Propane/Isobutane  | 68476-86-8 | 10 - 30     |

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical advice. |
| <b>Skin contact:</b> | Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.                  |
| <b>Eye contact:</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.   |
| <b>Ingestion:</b>    | DO NOT induce vomiting unless directed to do so by medical personnel. If symptoms develop and persist, get medical attention.  |
| <b>Symptoms:</b>     | See Section 11.  |

### 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media:</b>               | Carbon dioxide. Dry chemical. foam   |
| <b>Special firefighting procedures:</b>   | Use water spray to keep fire exposed containers cool and disperse vapors. Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.   |
| <b>Unusual fire or explosion hazards:</b> | Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. |
| <b>Hazardous combustion products:</b>     | Oxides of carbon. Hydrocarbons Butyraldehyde. Butyric acid. Acrolein. Aldehydes. Ketones. Organic acids.   |

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

|                                   |  |
|-----------------------------------|--|
| <b>Environmental precautions:</b> | Do not allow material to contaminate ground water system. Do not let product enter drains.   |
| <b>Clean-up methods:</b>          | Absorb the spilled material with an inert absorbent (nonflammable) material. Remove the absorbed material, and place in an appropriate chemical waste container for disposal. Eliminate ignition sources including sources of electrical, static or frictional sparks. |

## 7. HANDLING AND STORAGE

**Handling:** Avoid breathing mists or aerosols of this product. Keep away from sources of ignition - no smoking. Avoid contact with eyes, skin and clothing. Keep out of the reach of children.

**Storage:** Contents under pressure. Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F). Store in a cool, dry, well-ventilated area.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous Component(s)   | ACGIH TLV                   | OSHA PEL                                   | AIHA WEEL | OTHER |
|--|-----------------------------|--|-----------|-------|
| Acetone  | 750 ppm STEL<br>500 ppm TWA | 1,000 ppm (2,400 mg/m <sup>3</sup> ) PEL   | None      | None  |
| 2-Butoxyethanol  | 20 ppm TWA                  | 50 ppm (240 mg/m <sup>3</sup> ) PEL (SKIN) | None      | None  |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | None                        | None                                       | None      | None  |
| Formic acid  | 5 ppm TWA<br>10 ppm STEL    | 5 ppm (9 mg/m <sup>3</sup> ) PEL           | None      | None  |
| Propane/Isobutane  | None                        | None                                       | None      | None  |

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:** Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Physical state:</b>                          | Liquid   |
| <b>Color:</b>                                   | Light Grey   |
| <b>Odor:</b>                                    | Acidic, Vinegar-like   |
| <b>Odor threshold:</b>                          | Not available.   |
| <b>pH:</b>                                      | 3.0  |
| <b>Vapor pressure:</b>                          | Not available.   |
| <b>Boiling point/range:</b>                     | Not available.   |
| <b>Melting point/ range:</b>                    | Not available.   |
| <b>Specific gravity:</b>                        | 0.845 - 0.855  |
| <b>Vapor density:</b>                           | Not available.   |
| <b>Flash point:</b>                             | < -6.70 °C (< 19.94 °F)  |
| <b>Flashback:</b>                               | This product exhibits flashback when tested for flame extension. |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.   |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.   |
| <b>Autoignition temperature:</b>                | Not applicable   |
| <b>Evaporation rate:</b>                        | > 1.00   |
| <b>Solubility in water:</b>                     | Not available.   |
| <b>Partition coefficient (n-octanol/water):</b> | Not available.   |
| <b>VOC content:</b>                             | 33.1 %   |
| <b>Viscosity:</b>                               | Not available.   |

**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Stability:</b>                        | Stable under normal conditions of storage and use.   |
| <b>Hazardous reactions:</b>              | Will not occur.  |
| <b>Hazardous decomposition products:</b> | Oxides of carbon. Acrolein. Aldehydes. Ketones. Organic acids.   |
| <b>Incompatible materials:</b>           | Oxidizing agents. Concentrated nitric acid. Sulfuric acid. Alkalies. Acids. Potassium tert-butoxide.     |
| <b>Reactivity:</b>                       | Not available.   |
| <b>Conditions to avoid:</b>              | Keep away from open flames, hot surfaces and sources of ignition. Avoid temperatures above 49°C (120°F). |

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. |
| <b>Skin contact:</b> | May cause skin irritation. Repeated or prolonged contact can result in drying of skin. Symptoms may include redness, burning, drying, cracking and skin burns.                                   |
| <b>Eye contact:</b>  | Direct spray or vapors will irritate and may harm eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.   |
| <b>Ingestion:</b>    | Not a likely route of entry. May be harmful if swallowed. If swallowed, may be aspirated into the lungs resulting in inflammation and possible fluid accumulation.                               |

| Hazardous Component(s)   | LD50s and LC50s   | Immediate and Delayed Health Effects                           |
|--|---|--|
| Acetone  | Oral LD50 (RABBIT) = 5,340 mg/kg<br>Oral LD50 (RAT) = 5,800 mg/kg<br>Oral LD50 (RAT) = 9,800 mg/kg<br>Dermal LD50 (RABBIT) = 20,000 mg/kg<br>Inhalation LC50 (RAT, 8 h) = 50.1 mg/l<br>Inhalation LC50 (RAT, 4 h) = 76 mg/l | Blood, Central nervous system, Irritant, Reproductive          |
| 2-Butoxyethanol  | Oral LD50 (RAT) = 560 mg/kg<br>Oral LD50 (RABBIT) = 0.32 g/kg<br>Oral LD50 (RAT) = 1.48 g/kg<br>Dermal LD50 (RABBIT) = 400 mg/kg<br>Inhalation LC50 (RAT, 4 h) = 486 ppm<br>Inhalation LC50 (RAT, 4 h) = 450 ppm            | Blood, Central nervous system, Irritant, Kidney, Liver         |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | None  | No Records   |
| Formic acid  | Oral LD50 (RAT) = 730 mg/kg<br>Inhalation LC50 (RAT, 15 min) = 15 mg/l<br>Inhalation LC50 (RAT, 4 h) = 7.4 mg/l   | Central nervous system, Corrosive, Irritant, Kidney, Metabolic |
| Propane/Isobutane  | None  | No Records   |

| Hazardous Component(s)   | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|--|
| Acetone  | No             | No              | No                                       |
| 2-Butoxyethanol  | No             | No              | No                                       |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | No             | No              | No                                       |
| Formic acid  | No             | No              | No                                       |
| Propane/Isobutane  | No             | No              | No                                       |

**12. ECOLOGICAL INFORMATION**

**Ecological information:** Not available.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

|  |  |
|--|--|
| <b>Recommended method of disposal:</b> | Dispose of according to Federal, State and local governmental regulations.   |
| <b>Hazardous waste number:</b>         | It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24. |

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

|                                    |                     |
|------------------------------------|---------------------|
| <b>Proper shipping name:</b>       | Aerosols, flammable |
| <b>Hazard class or division:</b>   | 2.1                 |
| <b>Identification number:</b>      | UN 1950             |
| <b>Packing group:</b>              | None                |
| <b>DOT Hazardous Substance(s):</b> | Acetone             |

#### International Air Transportation (ICAO/IATA)

|                                  |                     |
|----------------------------------|---------------------|
| <b>Proper shipping name:</b>     | Aerosols, flammable |
| <b>Hazard class or division:</b> | 2.1                 |
| <b>Identification number:</b>    | UN 1950             |
| <b>Packing group:</b>            | None                |

#### Water Transportation (IMO/IMDG)

|                                  |          |
|----------------------------------|----------|
| <b>Proper shipping name:</b>     | AEROSOLS |
| <b>Hazard class or division:</b> | 2.1      |
| <b>Identification number:</b>    | UN 1950  |
| <b>Packing group:</b>            | None     |

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

|   |   |
|---|---|
| <b>TSCA 8 (b) Inventory Status:</b>     | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.   |
| <b>TSCA 12 (b) Export Notification:</b> | None above reporting de minimis   |
| <b>CERCLA/SARA Section 302 EHS:</b>     | None above reporting de minimis   |
| <b>CERCLA/SARA Section 311/312:</b>     | Immediate Health, Delayed Health, Fire, Sudden Release  |
| <b>CERCLA/SARA Section 313:</b>         | This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). 2-Butoxyethanol (CAS# 111-76-2). Formic acid (CAS# 64-18-6). |
| <b>California Proposition 65:</b>       | No California Proposition 65 listed chemicals are known to be present.  |

#### Canada Regulatory Information

|                             |   |
|-----------------------------|---|
| <b>CEPA DSL/NDL Status:</b> | All components are listed on or are exempt from listing on the Canadian Domestic Substances List. |
|-----------------------------|---|

### 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

**Prepared by:** Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

**Issue date:** 10/28/2014

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# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

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### Section 1 • Product and Company Identification

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**Product Name:** LPS® HDX

**Part Number(s):** 01020 (aerosol), 01005, 01055, C01020 (aerosol), C01005, C01055

**Chemical Name:** Chlorinated Hydrocarbon (trichloroethylene)

**Product Use:** A degreaser designed to remove grease, oil, dirt and other residues from metal and other hard surfaces near ignition sources.

**Manufacturer Information:** LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084  
**TEL:** USA & Canada: 1 800 241-8334  
Outside USA and Canada: +1 770 243-8800  
**FAX:** USA & Canada: 1 800 543-1563  
Outside USA and Canada: +1 770 243-8899

**Emergency Telephone Number:** Chemtrec: USA & Canada: 1 800 424-9300  
Outside USA and Canada: +1 703 527-3887

**Website:** <http://www.lpslabs.com>

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### Section 2 • Hazards Identification

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*This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.*

#### Emergency Overview:

**Aerosol:** DANGER: Harmful or fatal if swallowed. Vapor harmful. Contents under pressure. Harmful if inhaled.

**Bulk:** DANGER: Harmful or fatal if swallowed. Vapor harmful. Harmful if inhaled.

**Primary route(s) of entry:** Skin and eye contact. Inhalation.

#### Potential Acute Health Effects:

**Eyes:** Liquid in eyes produces pain and irritation with mild temporary damage possible. Vapor can irritate eyes.

**Skin:** Prolonged or repeated contact of liquid can cause skin irritation, defatting of the skin and dermatitis. Absorption of liquid through intact skin is possible, causing systemic poisoning but this is an unlikely route of significant toxic exposure.

**Inhalation:** High concentrations of vapor, in excess of the occupational exposure limit, will lead to adverse effects on the central nervous system, causing nausea, headaches, dizziness and lightheadedness (concentrations in excess of 300 ppm). Higher concentrations, around 5000 ppm and above, will cause anesthetic effects, leading to unconsciousness and in extreme cases, coma and death. Very high exposures may cause an abnormal heart rhythm and prove suddenly fatal.

**Ingestion:** Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs causing adverse health effects as described in the inhalation section above.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Potential Chronic Health Effects:

#### Carcinogenic Effects: See Section 11

NTP: Suspect carcinogen

IARC: Group 2A

OSHA: No

ACGIH: No

**Mutagenic Effects:** Has been linked to mutagenic effects in humans.

**Teratogenic Effects:** Did not cause birth defects in laboratory animals. Has been toxic to the fetus in laboratory animals at levels toxic to the mother.

**Target Organs:** In animals, effects have been reported on the following organs: kidney, liver, central nervous system, peripheral nervous system.

#### Medical conditions aggravated by exposure:

Repeated exposure to high levels produces adverse effects on the liver and, to a lesser extent on the kidney. A condition known as "Degreaser's Flush", a pronounced redness of the skin, may occur on the face, hands, arms, feet and trunk of some individuals following repeated exposure to trichloroethylene and the consumption of alcohol. This effect can intensify over for 30 minute period but usually disappears completely after 1 hour. These symptoms may occur up to 6 weeks after the last exposure to trichloroethylene and can reoccur if exposure continues.

#### Interactions with other chemicals which enhance toxicity:

Consumption of alcoholic beverages may increase potential for development of toxic effects resulting from exposure to this product.

#### Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

### Section 3 • Composition / Information on Ingredients

| Component                     | CASRN    | Weight Percent |
|-------------------------------|----------|----------------|
| Trichloroethylene             | 79-01-6  | 90 - 100%      |
| Carbon Dioxide (aerosol only) | 124-38-9 | 1 - 10%        |

### Section 4 • First Aid Measures

**Eyes:** Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention immediately.

**Skin:** Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

**Inhalation:** Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

**Ingestion:** DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.

**Notes to Physician:** Gastric lavage may be effective within four hours of ingestion. Aspiration hazard should be weighed against toxicity concerns. Chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur. Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators. Do not allow exposed person to exercise vigorously for 24 hours following potentially toxic exposure. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 5 • Fire Fighting Measures

|                                    |  |   |      |
|------------------------------------|--|---|------|
| <b>Products of Combustion:</b>     | Carbon monoxide, carbon dioxide, chlorine, hydrogen chloride and traces of phosgene.   |   |      |
| <b>General Fire Hazards:</b>       | High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.  |   |      |
| <b>Firefighting media:</b>         | SMALL FIRE: Use DRY chemical powder.<br>LARGE FIRE: Use CO2, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosions.                        |   |      |
| <b>Sensitivity to Impact:</b>      | None   | <b>Sensitivity to Static Discharge:</b> | None |
| <b>Protection Clothing (Fire):</b> | Concentrated vapors can be ignited by high intensity ignition source. Firefighters should wear self-contained, positive pressure breathing apparatus and full protective clothing due to thermal decomposition products. |   |      |

#### Special Remarks on Explosion Hazards:

Explosive mixtures of trichloroethylene and air can be formed but are difficult to ignite and require high intensity sources of heat such as welding arcs, sparks and flames or high temperatures and pressures; addition of small amounts of flammable substances to trichloroethylene (such as flammable liquids or gases) and/or an increase in the oxygen content of the local atmosphere may strongly enhance these effects. Welding or cutting should not be carried out on any vessel likely to contain solvent because of the risk of explosion. Thermal decomposition will evolve toxic and corrosive vapors of hydrogen chloride and phosgene. Containers may burst if overheated due to thermal expansion of the contents.

### Section 6 • Accidental Release Measures

|                                |  |  |
|--------------------------------|--|--|
| <b>Containment Procedures:</b> | <b>Small Spill and Leak:</b>   | Absorb with an inert material and dispose of properly.   |
|                                | <b>Large Spill and Leak:</b>   | Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Do not allow to enter drains, sewers or waterways. Spillages or uncontrolled discharges into waterways must be alerted to the Environment Agency or other appropriate regulatory body. |
| <b>Clean-Up Procedures:</b>    | Recover free product and place in a suitable container for disposal.           |  |
| <b>Evacuation Procedures:</b>  | Ventilate area of leak or spill. Keep unnecessary and unprotected people away. |  |
| <b>Special Procedures:</b>     | Ventilate area. Wear personal protective equipment during cleanup.             |  |



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 7 • Handling and Storage

**Handling:** DO NOT breathe vapors. Use only in well ventilated areas. Avoid contact with skin and eyes. Avoid contact with naked flames and hot surfaces as toxic and corrosive decomposition products (hydrogen chloride) can be formed. The vapor is heavier than air and may reach dangerously high concentrations in pits, tanks and other confined spaces. In such cases, provide adequate ventilation or wear suitable respiratory protective equipment with positive air supply. When using, do not smoke. When welding metals degreased with trichloroethylene, special care is needed to ensure all solvent has evaporated from the components. Separate cleaning and welding areas. Ensure vapors from degreasing operations do not enter welding areas - welding arcs can cause trichloroethylene vapors to break down producing toxic vapors.

**Storage:** Keep container dry. Keep in a cool, well ventilated place. Keep away from direct sunlight. Keep away from heat and ignition sources.

**Precautions to be taken in handling and storage:**

Store aerosols as Level 1 Aerosol (NFPA 30B). Store all materials in a dry, well-ventilated area. Avoid breathing vapors.

### Section 8 • Exposure Controls / Personal Protection

**Exposure Guidelines:**

| Component                     | CASRN    | OSHA                       | ACGIH                          | NIOSH                          | Supplier      |
|-------------------------------|----------|----------------------------|--------------------------------|--------------------------------|---------------|
| Trichloroethylene             | 79-01-6  | 100 ppm PEL<br>200 ppm PEL | 50 ppm TLV<br>100 ppm TLV      | Not established                | None reported |
| Carbon Dioxide (aerosol only) | 124-38-9 | 5000 ppm PEL               | 5000 ppm TLV<br>30000 ppm STEL | 5000 ppm TWA<br>30000 ppm STEL | None reported |

**Engineering Controls:** Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above. Lethal concentrations may exist in areas with poor ventilation.

**Personal protective equipment**

**Eye protection:** Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

**Hand protection:** Use chemically resistant protective gloves conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.

**Respiratory protection:** If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

**General Hygiene Considerations:** Wash thoroughly after handling. Have eye-wash facilities immediately available.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 9 • Physical and Chemical Properties

|                                  |  |   |                             |
|----------------------------------|--|---|-----------------------------|
| <b>Appearance:</b>               | Clear liquid   | <b>Color:</b>                                 | Clear, light brown          |
| <b>Odor:</b>                     | Sweet, spice   | <b>Evaporation Rate:</b>                      | 0.3 (Ethyl Ether = 1)       |
| <b>Solubility Description:</b>   | 0.1% in water  | <b>Flash Point:</b>                           | None                        |
| <b>Boiling Point:</b>            | 87°C (189°F)   | <b>Flash Point Method:</b>                    | Tag-Closed Cup              |
| <b>Specific Gravity (H2O=1):</b> | 1.41 - 1.47 @ 20°C   | <b>Decomposition Temperature:</b>             | Not established             |
| <b>Vapor Density (air = 1):</b>  | 4.5  | <b>Auto ignition temperature:</b>             | > 420°C (788°F)             |
| <b>Vapor Pressure:</b>           | 58 mm Hg @ 20°C  | <b>Flammable limits (estimated):</b>          | LOWER: 8.0%<br>UPPER: 10.5% |
| <b>Rule 1171 PPC:</b>            | Not established  | <b>Partition Coefficient (octanol/water):</b> | 2.4                         |
| <b>V.O.C. Content:</b>           | Aerosol: 97.8%, 1414 g/L, 11.8 lb/gal per CARB/OTC/EPA<br>Bulk: 100%, 1446 g/L, 12.1 lb/gal per CARB/OTC/EPA | <b>Odor Threshold:</b>                        | Not established             |
| <b>Melting Point:</b>            | Not established  | <b>Viscosity:</b>                             | 0.53 cPs @ 25°C             |
| <b>pH:</b>                       | Not applicable   | <b>Volatiles:</b>                             | 100%                        |
| <b>Heat of combustion:</b>       | Aerosol: < 20 kJ/g<br>Bulk: < 20 kJ/g  |   |                             |

### Section 10 • Stability and Reactivity

|                                  |   |
|----------------------------------|---|
| <b>Chemical Stability:</b>       | Product is stable under recommended storage conditions.   |
| <b>Conditions to Avoid:</b>      | Keep away from red hot surfaces, sparks or naked flames which may generate toxic fumes of phosgene and hydrogen chloride. Prolonged contact with aluminum or light alloys may cause a reaction resulting in the generation of hydrogen chloride gas and heat. |
| <b>Incompatibility:</b>          | Extremely reactive or incompatible with oxidizing agents. Reacts violently with sodium, potassium and barium metal. Reacts with finely divided aluminium, zinc and magnesium.   |
| <b>Hazardous Decomposition:</b>  | Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include hydrogen chloride and traces of phosgen gas.   |
| <b>Hazardous Polymerization:</b> | Will not occur.   |



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 11 • Toxicological Information

#### Acute and Chronic Toxicity

##### A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

Trichloroethylene: 200 ppm causes mild eye irritation, 400 ppm causes slight eye irritation and minimal lightheadedness after 3 hours. 1,000 to 1,200 ppm after 6 minutes causes eye and nasal irritation, lightheadedness and dizziness. 2,000 ppm cannot generally be tolerated, is irritating to the eyes and respiratory tract and causes drowsiness, dizziness and nausea within 5 minutes. Ventricular arrhythmias and very rapid respiration have been observed in individuals exposed to 15,000 ppm. High concentrations or prolonged overexposure can cause unconsciousness and death.

##### B: Component Analysis

| Component                     | CASRN    | LC-50                         | LD-50                            |
|-------------------------------|----------|-------------------------------|----------------------------------|
| Trichloroethylene             | 79-01-6  | 12500 ppm / rat / 4 hr*       | 4920 mg/kg / oral / rat*         |
|                               |          |                               | ~ 10000 mg/kg / dermal / rabbit* |
| Carbon Dioxide (aerosol only) | 124-38-9 | 470000 ppm / rat / 30 minutes | Not appropriate                  |

\* Supplier Data

##### Carcinogenicity:

Trichloroethylene has been shown to cause cancer in animals. Mechanistic studies have shown that some of these observations are not relevant to humans. Some experts believe that repeated exposure to high concentrations of trichloroethylene may cause kidney cancer, although the evidence for a causal relationship between these events is not conclusive.

The International Agency for Research on Cancer (IARC) has concluded that with respect to trichloroethylene, there is sufficient evidence of carcinogenicity to experimental animals and limited evidence of carcinogenicity to humans, resulting in a classification in Group 2A as a substance probably carcinogenic to humans. NTP has classified trichloroethylene as reasonably anticipated to be a human carcinogen. Although ACGIH currently does not consider trichloroethylene as a carcinogen, the ACGIH TLV Committee has placed this substance on the Notice of Intended Changes (NIC) list with a proposed change in the carcinogenicity classification from A5 to A2. Although this change is proposed, the A2 classification may or may not be adopted at some time in the future.

##### Mutagenicity:

Rodent - rat / 1000 ppm / 4 hr Brain and Coverings - Changes in surface EEG Peripheral Nerve and Sensation - Sensory syndrome diagnostic of central lesion Sense Organs and Special Senses (Eye) RTECS# KX4550000. Trichloroethylene has been linked to mutagenic effects in humans. Some studies measuring DNA damage (strand breaks, unscheduled DNA synthesis, in-vitro and in-vivo micronucleus and chromosomal aberrations) have been positive.

##### Neurotoxicity:

Rat / 1000 ppm / 4 hr Brain and Coverings - Changes in surface EEG Peripheral Nerve and Sensation - Sensory syndrome diagnostic of central lesion Sense Organs and Special Senses (Eye) RTECS# KX4550000.

##### Reproductive Toxicity:

Did not cause birth defects in laboratory animals; has been toxic to the fetus in laboratory animals at levels toxic to the mother.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 12 • Ecological Information

**Mobility:** Semi-volatile. Readily absorbed into soil. **Persistence / Degradability:** Only slightly biodegradable

**Bioaccumulative potential:** No bioaccumulation potential **Other adverse effects:** Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment. This product has potential for leaching.

#### Environmental Fate:

When released into the soil, trichloroethylene is expected to quickly evaporate, but large spills have potential to leach into groundwater. When released to water, trichloroethylene will quickly evaporate but large spills are expected to be slightly toxic to aquatic life. When released into the air, trichloroethylene is expected to have a half-life between 1 and 10 days.

#### Environmental Toxicity:

The LC50/96 hr values for trichloroethylene in fish are between 10 and 100 mg/L. Trichloroethylene has an experimentally determined bioconcentration factor (BCF) of less than 100 and is not expected to significantly bioaccumulate.

#### Ecotoxicity

| Effects on Organisms       | Component         | CASRN   | Test       | Species                     | Results         |
|----------------------------|-------------------|---------|------------|-----------------------------|-----------------|
| Acute Toxicity on Fishes   | Trichloroethylene | 79-01-6 | 96-hr LC50 | Pimephales Promelas         | 41 - 67 mg/L*   |
| Acute Toxicity on Daphnia  | Trichloroethylene | 79-01-6 | 48-hr LC50 | Daphnia Magna               | 2.2 - 100 mg/L* |
| Bacterial Inhibition       | Trichloroethylene | 79-01-6 | EC50       | Unidentified microorganism  | 260 mg/L*       |
| Growth inhibition of algae | Trichloroethylene | 79-01-6 | 24-hr LC50 | Algae                       | 410 mg/L*       |
| Bioaccumulation in fish    | Trichloroethylene | 79-01-6 | BCF        | Fish (unidentified species) | 17 - 90*        |

\* Supplier Data

### Section 13 • Disposal Considerations

**Waste Status:** Aerosol cans, if depressurized and emptied to less than 1 inch (2.54 cm) of fluid contents, are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). If disposed of in its received form, the aerosol product carries the waste codes D040 and D003 (U.S.). If disposed of in its received form, the bulk product carries the waste code D040.

**Disposal:** Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

**Note:** Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 14 • Transport Information

#### Aerosol

|                     |                       |   |                      |                      |
|---------------------|-----------------------|---|----------------------|----------------------|
| D.O.T. Ground       | Shipping Name:        | Consumer Commodity  | UN No.:              | NA                   |
|                     | Hazard Class:         | ORM-D   | Technical Name:      | NA                   |
|                     | Subclass:             | NA  | Hazard Label:        | ORM-D Already on box |
|                     | Packing Group:        | NA  |                      |                      |
| Road/Rail - ADR/RID | UN No.:               | 1950  | ADR Class:           | 2                    |
|                     | Packing Group:        | NA  | Classification Code: | 5T                   |
|                     | Name and description: | AEROSOLS, toxic   | Hazard ID No.:       | NA                   |
|                     | Labeling:             | 2.2, 6.1  | Technical Name:      | NA                   |
| IMDG-IMO            | UN No.:               | 1950  | Class:               | 2                    |
|                     | Shipping Name:        | Aerosols  | Subsidiary Risk:     | 6.1                  |
|                     | Labeling:             | 2   | Packing Group:       | NA                   |
|                     | Packing Instructions: | P003, LP02  | EmS:                 | F-D, S-U             |
| IATA - ICAO:        | Marine pollutant:     | No  | Technical Name:      | NA                   |
|                     | UN No.:               | 1950  | Class:               | 2.2                  |
|                     | Shipping Name:        | Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III | Subclass:            | 6.1                  |
|                     | Packing Instructions: | 203, Y203 (Ltd. Qty.)   | Packing Group:       | III                  |
|                     | Labeling:             | Non-flammable Gas & Toxic   | Technical Name:      | NA                   |

#### Bulk

|                     |                       |                   |                      |          |
|---------------------|-----------------------|-------------------|----------------------|----------|
| D.O.T. Ground       | Shipping Name:        | Trichloroethylene | UN No.:              | 1710     |
|                     | Hazard Class:         | 6.1               | Technical Name:      | NA       |
|                     | Subclass:             | NA                | Hazard Label:        | 6.1      |
|                     | Packing Group:        | NA                |                      |          |
| Road/Rail - ADR/RID | UN No.:               | 1710              | ADR Class:           | 6.1      |
|                     | Packing Group:        | III               | Classification Code: | T1       |
|                     | Name and description: | Trichloroethylene | Hazard ID No.:       | NA       |
|                     | Labeling:             | 6.1               | Technical Name:      | NA       |
| IMDG-IMO            | UN No.:               | 1710              | Class:               | 6.1      |
|                     | Shipping Name:        | Trichloroethylene | Subsidiary Risk:     | NA       |
|                     | Labeling:             | 6.1               | Packing Group:       | III      |
|                     | Packing Instructions: | P001, LP01        | EmS:                 | F-A, S-A |
| IATA - ICAO:        | Marine pollutant:     | No                | Technical Name:      | NA       |
|                     | UN No.:               | 1710              | Class:               | 6.1      |
|                     | Shipping Name:        | Trichloroethylene | Subclass:            | NA       |
|                     | Packing Instructions: | 655, 663 (CAO)    | Packing Group:       | III      |
|                     | Labeling:             | Toxic             | Technical Name:      | NA       |

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 15 • Regulatory Information

#### U.S. Federal Regulations

**RCRA Hazardous Waste No.:** D040, D003 (aerosols only)

**Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):**  
Trichloroethylene 79-01-6 100 lbs

**Toxic Substances Control Act (TSCA):**  
All components of this product are TSCA inventory listed and/or are exempt.

**Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:**  
Sudden Release of Pressure (aerosols only), Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

**This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):**  
Trichloroethylene 79-01-6

**Section 112 Hazardous Air Pollutants (HAPs):** Trichloroethylene 79-01-6

#### State Regulations

**California:** This product contains chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

**California and OTC States:** This product is for manufacturing use only - not for retail sale.

**New Jersey Right to Know:**  
Aerosol: Trichloroethylene 79-01-6 • Butylene Oxide 106-88-7 • Methyl Pyrrole 96-54-8 • Butanone 78-93-3 • Carbon Dioxide 124-38-9

Bulk: Trichloroethylene 79-01-6 • Butylene Oxide 106-88-7 • Methyl Pyrrole 96-54-8 • Butanone 78-93-3

#### International Regulations

**Canadian Environmental Protection Act (CEPA):**  
All of the components of this product are included on the Canadian Domestic Substances list (DSL).

**Canadian Workplace Hazardous Materials Information System WHMIS:**  
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS Classification:**  
Aerosol: Class A, Class D1B, Class D2A, Class D2B



**WHMIS Classification:**  
Bulk: Class D1B, Class D2A, D2B



#### Other Regulations:

Montreal Protocol listed ingredients:  
Stockholm Convention listed ingredients:  
Rotterdam Convention listed ingredients:  
RoHS Compliant:

None  
None  
None  
Yes



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 16 • Other Information

| MSDS#: 11020<br>MSDS Preparation<br>Responsible Name:<br>Elena Badiuzzi<br>Compliance Manager<br>Telephone: +1 770 243-8800 | HMIS 1996     |   | HMIS III                 |       | Health | <br>Special | Reactivity |
|---|---------------|---|--------------------------|-------|--------|-------------|------------|
|   | Health:       | 2 | Health:                  | [*] 2 |        |             |            |
|   | Flammability: | 1 | Flammability Aerosol:    | 1     |        |             |            |
|   |               |   | Flammability Bulk:       | 1     |        |             |            |
|   | Reactivity:   | 0 | Physical Hazard Aerosol: | 2     |        |             |            |
|   |               |   | Physical Hazard Bulk:    | 0     |        |             |            |

#### Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Elena Badiuzzi, Compliance Manager  
LPS Laboratories, a division of Illinois Tool Works

# SAFETY DATA SHEET

## Power Steering Stop Leak



### Section 1. Identification

**GHS product identifier** : Power Steering Stop Leak

**Other means of identification** : Not available.

**Product number** : 10008, 10011, 10143, 10144, 10145, 30008, 30008A, 30008R, 30008O, 30011, 30011A, 30011O

#### Relevant identified uses of the substance or mixture and uses advised against

Oil Additive

**Supplier's details** : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

**Emergency telephone number (with hours of operation)** : ChemTel 1-800-255-3924 (USA, Canada, Puerto Rico, US V.I.) 1-813-248-0585 (International). 24 hrs/day, 365 days/year.

### Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

#### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

#### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : None known.





## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not available.  
**Product code** : Not available.

| Ingredient name   | %        | CAS number |
|---|----------|------------|
| Distillates (petroleum), solvent-refined heavy naphthenic | 60 - 100 | 64741-96-4 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.



## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : No specific data.

**Special protective actions for fire-fighters** : No special precaution is required.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name   | Exposure limits   |
|---|---|
| Distillates (petroleum), solvent-refined heavy naphthenic | <b>ACGIH TLV (United States, 3/2012).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction<br><b>NIOSH REL (United States, 6/2009).</b><br>TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist<br><b>OSHA PEL (United States, 6/2010).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. |

- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Red. [Light]
- Odor** : Petroleum.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >260°C (>500°F)
- Flash point** : Closed cup: 223.88°C (435°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.9218
- Solubility** : Not available.
- Solubility in water** : Negligible.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (100°C (212°F)): 0.45 cm<sup>2</sup>/s (45 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

**Conditions to avoid** : No specific data.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                                   | Result      | Species | Dose        | Exposure |
|---|-------------|---------|-------------|----------|
| Distillates (petroleum), solvent-refined heavy naphthenic | LD50 Dermal | Rabbit  | >5000 mg/kg | -        |
|   | LD50 Oral   | Rat     | >5000 mg/kg | -        |

#### Irritation/Corrosion

**Skin** : There is no data available.

**Eyes** : There is no data available.

**Respiratory** : There is no data available.

#### Sensitization

**Skin** : There is no data available.

**Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

|              |   |
|--------------|---|
| Eye contact  | : No known significant effects or critical hazards. |
| Inhalation   | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion    | : No known significant effects or critical hazards. |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                             |   |
|-----------------------------|---|
| Potential immediate effects | : No known significant effects or critical hazards. |
| Potential delayed effects   | : No known significant effects or critical hazards. |

#### Long term exposure

|                             |   |
|-----------------------------|---|
| Potential immediate effects | : No known significant effects or critical hazards. |
| Potential delayed effects   | : No known significant effects or critical hazards. |

#### Potential chronic health effects

|                       |   |
|-----------------------|---|
| General               | : No known significant effects or critical hazards. |
| Carcinogenicity       | : No known significant effects or critical hazards. |
| Mutagenicity          | : No known significant effects or critical hazards. |
| Teratogenicity        | : No known significant effects or critical hazards. |
| Developmental effects | : No known significant effects or critical hazards. |
| Fertility effects     | : No known significant effects or critical hazards. |

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

|   |                               |
|---|-------------------------------|
| Soil/water partition coefficient ( $K_{oc}$ ) | : There is no data available. |
|---|-------------------------------|

|                       |   |
|-----------------------|---|
| Other adverse effects | : No known significant effects or critical hazards. |
|-----------------------|---|



## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | DOT Classification | IMDG           | IATA           |
|----------------------------|--------------------|----------------|----------------|
| UN number                  | Not regulated.     | Not regulated. | Not regulated. |
| UN proper shipping name    | -                  | -              | -              |
| Transport hazard class(es) | -                  | -              | -              |
| Packing group              | -                  | -              | -              |
| Environmental hazards      | No.                | No.            | No.            |
| Additional information     | -                  | -              | -              |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** All components are listed or exempted.  
**United States inventory (TSCA 8b):** All components are listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed





## Section 15. Regulatory information

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Distillates (petroleum), solvent-refined heavy naphthenic

**Pennsylvania** : None of the components are listed.

### California Prop. 65

No products were found.

### International regulations

**International lists** :

- Australia inventory (AICS)**: All components are listed or exempted.
- China inventory (IECSC)**: All components are listed or exempted.
- Japan inventory**: Not determined.
- Korea inventory**: All components are listed or exempted.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
- Philippines inventory (PICCS)**: All components are listed or exempted.
- Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

**Health** : 0 \* **Flammability** : 1 **Physical hazards** : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.





## Section 16. Other information

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

**Health :** 0      **Flammability :** 1      **Instability :** 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

**Date of issue mm/dd/yyyy :** 04/15/2013

**Version :** 1

**Revised Section(s) :** Not applicable.

**Prepared by :** KMK Regulatory Services Inc.

**Key to abbreviations :** ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

Lucas Synthetic SAE 75W-90 Gear Oil



## Section 1. Identification

GHS product identifier : Lucas Synthetic SAE 75W-90 Gear Oil  
Other means of identification : Lucas Synthetic SAE 75W-90 Gear Oil  
Product number : 10047, 20047, 10048, 20048, 10072, 10073, 10074, 10652

### Relevant identified uses of the substance or mixture and uses advised against

Lubricating oil.

Supplier's details : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149  
(951) 847-5949  
Markn@lucasoil.com  
7:00A.M. to 5:00P.M. Monday thru Friday

## Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

### GHS label elements

Signal word : No signal word.  
Hazard statements : No known significant effects or critical hazards.

### Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.  
Prevention : Not applicable.  
Response : Not applicable.  
Storage : Not applicable.  
Disposal : Not applicable.  
Hazards not otherwise classified : None known.





## Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
Other means of identification : Lucas Synthetic SAE 75W-90 Gear Oil

### CAS number/other identifiers

CAS number : Not applicable.  
Product code : 10047, 20047, 10048, 20048, 10072, 10073, 10074, 10652

| Ingredient name  | %                 | CAS number               |
|--|-------------------|--------------------------|
| 1-Decene, homopolymer, hydrogenated<br>Antimony, dialkyl dithiocarbamate | 60 - 100<br>1 - 5 | 68037-01-4<br>15890-25-2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Wash contaminated skin with soap and water. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



## Section 4. First aid measures

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
metal oxide/oxides

- Special protective actions for fire-fighters** : No special precaution is required.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name                   | Exposure limits   |
|-----------------------------------|---|
| Antimony, dialkyl dithiocarbamate | ACGIH TLV (United States, 3/2012).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hours.<br>NIOSH REL (United States, 6/2009).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 10 hours.<br>OSHA PEL (United States, 6/2010).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hours. |

- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

## Section 8. Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Amber.
- Odor** : Petroleum. Sulfur.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >260°C (>500°F)
- Flash point** : Closed cup: 198.889°C (390°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.8939
- Solubility** : Negligible at 25°C
- Solubility in water** : 0 g/l
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (100°C (212°F)): 0.15 cm<sup>2</sup>/s (15 cSt)



## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Excessive heat.
- Incompatible materials** : Reactive or incompatible with the following materials: Strong oxidizers.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name           | Result                   | Species       | Dose                       | Exposure |
|-----------------------------------|--------------------------|---------------|----------------------------|----------|
| Antimony, dialkyl dithiocarbamate | LD50 Dermal<br>LD50 Oral | Rabbit<br>Rat | 16000 mg/kg<br>16400 mg/kg | -<br>-   |

#### Irritation/Corrosion

- Skin** : There is no data available.
- Eyes** : There is no data available.
- Respiratory** : There is no data available.

#### Sensitization

- Skin** : There is no data available.
- Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available. Specific target organ toxicity (repeated exposure) There is no data available.

#### Aspiration hazard

| Name                                | Result                         |
|-------------------------------------|--------------------------------|
| 1-Decene, homopolymer, hydrogenated | ASPIRATION HAZARD - Category 1 |



## Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

Eye contact : No known significant effects or critical hazards.  
Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
Skin contact : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.  
Inhalation : No known significant effects or critical hazards.  
Skin contact : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects : No known significant effects or critical hazards.  
Potential delayed effects : No known significant effects or critical hazards.

#### Long term exposure

Potential immediate effects : No known significant effects or critical hazards.  
Potential delayed effects : No known significant effects or critical hazards.

### Potential chronic health effects

General : No known significant effects or critical hazards.  
Carcinogenicity : No known significant effects or critical hazards.  
Mutagenicity : No known significant effects or critical hazards.  
Teratogenicity : No known significant effects or critical hazards.  
Developmental effects : No known significant effects or critical hazards.  
Fertility effects : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential



## Section 12. Ecological information

There is no data available.

### Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| DOT Classification         |                | IMDG           | IATA           |
|----------------------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              |
| Packing group              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            |
| Additional information     | -              | -              | -              |

**Special precautions for user** : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.





## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
United States inventory (TSCA 8b): All components are listed or exempted.  
Clean Water Act (CWA) 307: Antimony, dialkyl dithiocarbamate

**Clean Air Act Section 112** : Listed

(b) Hazardous Air  
Pollutants (HAPs)

**Clean Air Act Section 602** : Not listed  
Class I Substances

**Clean Air Act Section 602** : Not listed  
Class II Substances

**DEA List I Chemicals** : Not listed  
(Precursor Chemicals)

**DEA List II Chemicals** : Not listed  
(Essential Chemicals)

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### SARA 313

|                                 | Product name                      | CAS number | %     |
|---------------------------------|-----------------------------------|------------|-------|
| Form R - Reporting requirements | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |
| Supplier notification           | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Antimony, dialkyl dithiocarbamate

**Pennsylvania** : The following components are listed: Antimony, dialkyl dithiocarbamate

### California Prop. 65

No products were found.

### International regulations





## Section 15. Regulatory information

- International lists** : Australia inventory (AICS): All components are listed or exempted.  
China inventory (IECSC): All components are listed or exempted.  
Japan inventory: Not determined.  
Korea inventory: All components are listed or exempted.  
Malaysia Inventory (EHS Register): Not determined.  
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.  
Philippines inventory (PICCS): All components are listed or exempted.  
Taiwan inventory (CSNN): Not determined.
- Chemical Weapons Convention List Schedule I Chemicals** : Not listed
- Chemical Weapons Convention List Schedule II Chemicals** : Not listed
- Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health : 0      Flammability : 1      Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

Health : 0      Flammability : 1      Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

- Date of issue mm/dd/yyyy** : 06/16/2013
- Version** : 1
- Revised Section(s)** : Not applicable.
- Prepared by** : KMK Regulatory Services Inc.
- Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations





## Section 16. Other information

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.





# SAFETY DATA SHEET

## 1. Identification

|  |  |   |
|--|--|---|
| Product identifier                                     | Heavy Duty Corrosion Inhibitor                               |   |
| Other means of identification                          |  |   |
| Product code   | 76026  |   |
| Recommended use  | Corrosion inhibitor  |   |
| Recommended restrictions                               | None known.  |   |
| Manufacturer/Importer/Supplier/Distributor information |  |   |
| Manufactured or sold by:                               |  |   |
| Company name   | CRC Canada Co.   |   |
| Address  | 2-1246 Lorimar Dr.<br>Mississauga, Ontario L5S 1R2<br>Canada |   |
| Telephone  | 905-670-2291   |   |
| Website  | www.crc-canada.ca  |   |
| E-mail   | Support.CA@crcindustries.com                                 |   |
| Emergency phone number                                 | 24-Hour Emergency<br>(CHEMTREC)                              | 800-424-9300 (Canada)<br>703-527-3887 (International) |

## 2. Hazard(s) identification

|                       |  |                                     |
|-----------------------|--|-------------------------------------|
| Physical hazards      | Flammable aerosols                                     | Category 1                          |
|                       | Gases under pressure                                   | Liquefied gas                       |
|                       | Physical hazards not otherwise classified              | Category 1                          |
| Health hazards        | Skin corrosion/irritation                              | Category 2                          |
|                       | Serious eye damage/eye irritation                      | Category 2A                         |
|                       | Reproductive toxicity (fertility)                      | Category 2                          |
|                       | Specific target organ toxicity, single exposure        | Category 3 narcotic effects         |
|                       | Specific target organ toxicity, repeated exposure      | Category 1 (central nervous system) |
|                       | Aspiration hazard                                      | Category 1                          |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard     | Category 2                          |
|                       | Hazardous to the aquatic environment, long-term hazard | Category 2                          |

### Label elements



### Signal word

Danger

### Hazard statement

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. Causes damage to organs (central nervous system) through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement****Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

**Response**

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. In case of leakage, eliminate all ignition sources. Collect spillage.

**Storage**

Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

None known.

---

**3. Composition/information on ingredients**
**Mixtures**

| Chemical name  | Common name and synonyms | CAS number | %       |
|--|--------------------------|------------|---------|
| liquefied petroleum gas                                |                          | 68476-86-8 | 20 - 30 |
| naphtha (petroleum), hydrotreated light                |                          | 64742-49-0 | 10 - 20 |
| stoddard solvent                                       |                          | 8052-41-3  | 10 - 20 |
| 2-methylpentane  |                          | 107-83-5   | 5 - 10  |
| distillates (petroleum), hydrotreated light            |                          | 64742-47-8 | 5 - 10  |
| dipropylene glycol monomethyl ether                    |                          | 34590-94-8 | 3 - 5   |
| naphtha (petroleum), hydrotreated heavy                |                          | 64742-48-9 | 1 - 3   |
| n-hexane   |                          | 110-54-3   | 1 - 3   |
| distillates (petroleum), hydrotreated heavy paraffinic |                          | 64742-54-7 | < 1     |
| distillates (petroleum), hydrotreated light paraffinic |                          | 64742-55-8 | < 1     |
| petrolatum, micro soft wax                             |                          | 8009-03-8  | < 1     |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

---

**4. First-aid measures**
**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

|                            |  |
|----------------------------|--|
| <b>General information</b> | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |
|----------------------------|--|

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.   |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.   |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| <b>Methods and materials for containment and cleaning up</b>               | Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.   |
| <b>Environmental precautions</b>   | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.   |

## 7. Handling and storage

|                                      |  |
|--------------------------------------|--|
| <b>Precautions for safe handling</b> | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
|--------------------------------------|--|

**Conditions for safe storage,  
including any incompatibilities**

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****ACGIH****Components****Type****Value****Form**distillates (petroleum),  
hydrotreated heavy  
paraffinic (CAS 64742-54-7)

TWA

5 mg/m3

Inhalable fraction

**US. ACGIH Threshold Limit Values****Components****Type****Value****Form**2-methylpentane (CAS  
107-83-5)

STEL

1000 ppm

dipropylene glycol  
monomethyl ether (CAS  
34590-94-8)

TWA

500 ppm

STEL

150 ppm

distillates (petroleum),  
hydrotreated heavy  
paraffinic (CAS 64742-54-7)

TWA

100 ppm

TWA

5 mg/m3

Inhalable fraction.

distillates (petroleum),  
hydrotreated light paraffinic  
(CAS 64742-55-8)

TWA

5 mg/m3

Inhalable fraction.

n-hexane (CAS 110-54-3)

TWA

50 ppm

petrolatum, micro soft wax  
(CAS 8009-03-8)

TWA

5 mg/m3

Inhalable fraction.

stoddard solvent (CAS  
8052-41-3)

TWA

100 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)****Components****Type****Value****Form**2-methylpentane (CAS  
107-83-5)

STEL

3500 mg/m3

TWA

1000 ppm  
1760 mg/m3  
500 ppmdipropylene glycol  
monomethyl ether (CAS  
34590-94-8)

STEL

909 mg/m3

TWA

150 ppm  
606 mg/m3  
100 ppmdistillates (petroleum),  
hydrotreated light (CAS  
64742-47-8)

TWA

200 mg/m3

Vapor.

distillates (petroleum),  
hydrotreated light paraffinic  
(CAS 64742-55-8)

STEL

10 mg/m3

Mist.

naphtha (petroleum),  
hydrotreated heavy (CAS  
64742-48-9)

TWA

5 mg/m3

TWA

1590 mg/m3

Mist.

naphtha (petroleum),  
hydrotreated light (CAS  
64742-49-0)

TWA

400 ppm  
1590 mg/m3

400 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

| Components                                 | Type | Value                | Form  |
|--|------|----------------------|-------|
| n-hexane (CAS 110-54-3)                    | TWA  | 176 mg/m3<br>50 ppm  | Mist. |
| petrolatum, micro soft wax (CAS 8009-03-8) | STEL | 10 mg/m3             |       |
| stoddard solvent (CAS 8052-41-3)           | TWA  | 5 mg/m3              |       |
|  | TWA  | 572 mg/m3<br>100 ppm |       |

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

| Components  | Type | Value     | Form         |
|---|------|-----------|--------------|
| 2-methylpentane (CAS 107-83-5)  | TWA  | 200 ppm   | Mist.        |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | STEL | 150 ppm   |              |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm   |              |
|   | TWA  | 1 mg/m3   |              |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            | TWA  | 200 mg/m3 | Non-aerosol. |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | TWA  | 0.2 mg/m3 | Mist.        |
| n-hexane (CAS 110-54-3)   | TWA  | 20 ppm    |              |
| stoddard solvent (CAS 8052-41-3)  | STEL | 580 mg/m3 |              |
|   | TWA  | 290 mg/m3 |              |

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

| Components  | Type | Value    | Form                |
|---|------|----------|---------------------|
| 2-methylpentane (CAS 107-83-5)  | STEL | 1000 ppm |                     |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | TWA  | 500 ppm  |                     |
|   | STEL | 150 ppm  |                     |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm  |                     |
|   | TWA  | 5 mg/m3  | Inhalable fraction. |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | TWA  | 5 mg/m3  | Inhalable fraction. |
| n-hexane (CAS 110-54-3)   | TWA  | 50 ppm   | Inhalable fraction. |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | TWA  | 5 mg/m3  |                     |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 100 ppm  |                     |

**Canada - Ontario**

| Components  | Type | Value    |  |
|---|------|----------|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | STEL | 10 mg/m3 |  |
|   | TWA  | 5 mg/m3  |  |

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

| Components                     | Type | Value    | Form |
|--------------------------------|------|----------|------|
| 2-methylpentane (CAS 107-83-5) | STEL | 1000 ppm |      |

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

| Components  | Type | Value     | Form                |
|---|------|-----------|---------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | TWA  | 500 ppm   | Inhalable fraction. |
|   | STEL | 150 ppm   |                     |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm   |                     |
|   | TWA  | 5 mg/m3   |                     |
| distillates (petroleum), hydrotreated heavy (CAS 64742-48-9)            | TWA  | 525 mg/m3 |                     |
| n-hexane (CAS 110-54-3)   | TWA  | 50 ppm    |                     |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 100 ppm   |                     |

**Canada - Quebec**

| Components  | Type | Value    |
|---|------|----------|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | STEL | 10 mg/m3 |
|   | TWA  | 5 mg/m3  |

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

| Components  | Type | Value      | Form  |
|---|------|------------|-------|
| 2-methylpentane (CAS 107-83-5)  | STEL | 3500 mg/m3 |       |
|   | TWA  | 1000 ppm   |       |
|   |      | 1760 mg/m3 |       |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | STEL | 500 ppm    |       |
|   |      | 909 mg/m3  |       |
|   | TWA  | 150 ppm    |       |
|   |      | 606 mg/m3  |       |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | STEL | 100 ppm    | Mist. |
|   |      | 10 mg/m3   |       |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                | TWA  | 5 mg/m3    | Mist. |
|   |      | 1590 mg/m3 |       |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                | TWA  | 400 ppm    |       |
|   |      | 1590 mg/m3 |       |
| n-hexane (CAS 110-54-3)   | TWA  | 400 ppm    |       |
|   |      | 176 mg/m3  |       |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | STEL | 50 ppm     | Mist. |
|   |      | 10 mg/m3   |       |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 5 mg/m3    | Mist. |
|   |      | 525 mg/m3  |       |
|   |      | 100 ppm    |       |

**Biological limit values**
**ACGIH Biological Exposure Indices**

| Components              | Value    | Determinant                         | Specimen | Sampling Time |
|-------------------------|----------|-------------------------------------|----------|---------------|
| n-hexane (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedio n, without hydrolysis | Urine    | *             |

\* - For sampling details, please see the source document.

## Exposure guidelines

### Canada - Alberta OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### Canada - British Columbia OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### Canada - Manitoba OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Ontario OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Quebec OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Saskatchewan OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### US ACGIH Threshold Limit Values: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear protective gloves such as: Neoprene. Nitrile.

**Other** Wear suitable protective clothing.

**Respiratory protection** If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using, do not eat, drink or smoke. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Aerosol.

**Color** Dark amber.

**Odor** Petroleum.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -244.7 °F (-153.7 °C) estimated

|   |  |
|---|--|
| <b>Initial boiling point and boiling range</b>      | 118.4 °F (48 °C) estimated                       |
| <b>Flash point</b>                                  | < 0 °F (< -17.8 °C) Tag Closed Cup               |
| <b>Evaporation rate</b>                             | Fast.  |
| <b>Flammability (solid, gas)</b>                    | Not available.                                   |
| <b>Upper/lower flammability or explosive limits</b> |  |
| <b>Flammability limit - lower (%)</b>               | 0.7 % estimated                                  |
| <b>Flammability limit - upper (%)</b>               | 14 % estimated                                   |
| <b>Vapor pressure</b>                               | 1451.5 hPa estimated                             |
| <b>Vapor density</b>                                | > 1 (air = 1)                                    |
| <b>Relative density</b>                             | 0.72 estimated                                   |
| <b>Solubility(ies)</b>                              |  |
| <b>Solubility (water)</b>                           | Negligible.                                      |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                                   |
| <b>Auto-ignition temperature</b>                    | 404.6 °F (207 °C) estimated                      |
| <b>Decomposition temperature</b>                    | Not available.                                   |
| <b>Viscosity</b>                                    | Not available.                                   |
| <b>Other information</b>                            |  |
| <b>Percent volatile</b>                             | 79.2 % estimated                                 |
| <b>VOC (Weight %)</b>                               | 28.4 % estimated<br>28.4 % Switzerland estimated |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Heat. Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | Carbon oxides.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.                           |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|---|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. |
|-----------------------|---|

| <b>Components</b>                                    | <b>Species</b> | <b>Test Results</b> |
|--|----------------|---------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) |                |                     |
| <b>Acute</b>   |                |                     |
| <b>Dermal</b>  |                |                     |
| LD50   | Rabbit         | 9510 mg/kg          |

| Components  | Species | Test Results            |
|---|---------|-------------------------|
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 552 ppm                 |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | 5135 mg/kg              |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 5000 mg/kg            |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 15000 mg/kg           |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rat     | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | > 5.2 mg/l, 4 hours     |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg, 2.5 hours |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | > 5 mg/l                |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg            |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 61 mg/l, 4 Hours        |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg            |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 61 mg/l, 4 Hours        |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 25 ml/kg              |
| n-hexane (CAS 110-54-3)   |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 1300 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | < 48000 ppm, 4 Hours    |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | 15840 mg/kg             |

| Components                       | Species | Test Results                       |
|----------------------------------|---------|------------------------------------|
| stoddard solvent (CAS 8052-41-3) |         |                                    |
| <b>Acute</b>                     |         |                                    |
| <b>Dermal</b>                    |         |                                    |
| LD50                             | Rabbit  | > 3000 mg/kg                       |
| <b>Inhalation</b>                |         |                                    |
| LC50                             | Rat     | > 5500 mg/m <sup>3</sup> , 4 hours |
| <b>Oral</b>                      |         |                                    |
| LD50                             | Rat     | > 5000 mg/kg                       |

\* Estimates for product may be based on additional component data not shown.

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Causes skin irritation.  |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation.   |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>                | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |

#### Carcinogenicity

##### ACGIH Carcinogens

|   |  |
|---|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | A4 Not classifiable as a human carcinogen.                                   |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | A4 Not classifiable as a human carcinogen.                                   |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | A2 Suspected human carcinogen.<br>A4 Not classifiable as a human carcinogen. |

##### Canada - Manitoba OELs: carcinogenicity

|   |  |
|---|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | Not classifiable as a human carcinogen.                                |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | Not classifiable as a human carcinogen.                                |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | Not classifiable as a human carcinogen.<br>Suspected human carcinogen. |

##### IARC Monographs. Overall Evaluation of Carcinogenicity

|   |   |
|---|---|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | 3 Not classifiable as to carcinogenicity to humans. |
| stoddard solvent (CAS 8052-41-3)  | 3 Not classifiable as to carcinogenicity to humans. |

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | Suspected of damaging fertility.   |
| <b>Specific target organ toxicity - single exposure</b>   | May cause drowsiness and dizziness.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Causes damage to organs (central nervous system) through prolonged or repeated exposure. |
| <b>Aspiration hazard</b>                                  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>                                    | Causes damage to organs through prolonged or repeated exposure.                          |

## 12. Ecological information

|                    |  |
|--------------------|--|
| <b>Ecotoxicity</b> | Toxic to aquatic life with long lasting effects. |
|--------------------|--|

| Components                     | Species      | Test Results          |
|--------------------------------|--------------|-----------------------|
| 2-methylpentane (CAS 107-83-5) |              |                       |
| <b>Aquatic</b>                 |              |                       |
| <i>Acute</i>                   |              |                       |
| Crustacea                      | EC50 Daphnia | 1 - 10 mg/l, 48 hours |
| Fish                           | LC50 Fish    | 1 - 10 mg/l, 96 hours |

| Components  | Species |   | Test Results                 |
|---|---------|---|------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Daphnia   | > 5000 mg/l, 48 hours        |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 10000 mg/l, 96 hours         |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Water flea (Daphnia magna)                          | > 10000 mg/l, 48 hours       |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | > 100 mg/l, 96 hours         |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 45 mg/l, 96 hours            |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                |         |   |                              |
| Aquatic   |         |   |                              |
| Crustacea   | EC50    | Water flea (Daphnia pulex)                          | 2.7 - 5.1 mg/l, 48 hours     |
| Fish  | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours           |
|   |         |   | 8.8 mg/l, 96 hours           |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Daphnia   | 1 - 10 mg/l, 48 hours        |
| Fish  | LC50    | Fish  | 1 - 10 mg/l, 96 hours        |
| n-hexane (CAS 110-54-3)   |         |   |                              |
| Aquatic   |         |   |                              |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 2.101 - 2.981 mg/l, 96 hours |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

#### Bioaccumulative potential

##### Partition coefficient n-octanol / water (log Kow)

|                  |             |
|------------------|-------------|
| 2-methylpentane  | 3.74        |
| n-hexane         | 3.9         |
| stoddard solvent | 3.16 - 7.15 |

##### Bioconcentration factor (BCF)

|   |            |
|---|------------|
| naphtha (petroleum), hydrotreated light | 10 - 25000 |
|---|------------|

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal of waste from residues / unused products** Contents under pressure. Do not puncture, incinerate or crush. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### TDG

**UN number** UN1950

|                                     |   |
|-------------------------------------|---|
| <b>UN proper shipping name</b>      | AEROSOLS, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | Not available.  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | 80  |

#### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | No.   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions.  |
| <b>Cargo aircraft only</b>          | Allowed with restrictions.  |

#### IMDG

|   |   |
|---|---|
| <b>UN number</b>  | UN1950  |
| <b>UN proper shipping name</b>  | AEROSOLS, Limited Quantity  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>  | 2   |
| <b>Subsidiary risk</b>  | -   |
| <b>Packing group</b>  | Not applicable.   |
| <b>Environmental hazards</b>  |   |
| <b>Marine pollutant</b>   | No.   |
| <b>EmS</b>  | Not available.  |
| <b>Special precautions for user</b>   | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not established.  |

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## 15. Regulatory information

### Canadian regulations

#### Controlled Drugs and Substances Act

Not regulated.

#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto protocol

Not applicable.

#### Montreal Protocol

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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**16. Other information**

|                            |  |
|----------------------------|--|
| <b>Issue date</b>          | 10-14-2016   |
| <b>Version #</b>           | 01   |
| <b>Further information</b> | CRC # 522G-H   |
| <b>Disclaimer</b>          | The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Canada Co.. |

SAFETY DATA SHEET

1. Identification

|                                |   |
|--------------------------------|---|
| Product number                 | 10000028754   |
| Product identifier             | 11 OZ NAPA MAC'S OPEN GEAR LUBE 1366  |
| Revision date                  | 09-29-2016  |
| Company information            | NAPA Balkamp<br>2601 Stout Heritage Parkway<br>Plainfield, IN 46168 United States |
| Company phone                  | General Assistance 1-317-754-3900   |
| Emergency telephone US         | 1-866-836-8855  |
| Emergency telephone outside US | 1-952-852-4646  |
| Version #                      | 02  |
| Supersedes date                | 06-17-2016  |
| Recommended use                | LUBRICANT   |
| Recommended restrictions       | None known.   |

2. Hazard(s) identification

|                      |   |            |
|----------------------|---|------------|
| Physical hazards     | Flammable aerosols                                  | Category 1 |
| Health hazards       | Acute toxicity, inhalation                          | Category 4 |
|                      | Skin corrosion/irritation                           | Category 2 |
|                      | Reproductive toxicity (fertility, the unborn child) | Category 2 |
|                      | Aspiration hazard                                   | Category 1 |
| OSHA defined hazards | Not classified.                                     |            |

Label elements



|                         |  |            |
|-------------------------|--|------------|
| Signal word             | Danger   |            |
| Hazard statement        | Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Harmful if inhaled. Suspected of damaging the unborn child. Suspected of damaging fertility.  |            |
| Precautionary statement |  |            |
| Prevention              | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. |            |
| Response                | If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.   |            |
| Storage                 | Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |            |
| Disposal                | Dispose of contents/container in accordance with local/regional/national/international regulations.  |            |
| Environmental hazards   | Hazardous to the aquatic environment, acute hazard   | Category 2 |
|                         | Hazardous to the aquatic environment, long-term hazard   | Category 2 |

**Hazard(s) not otherwise classified (HNOC)** Combustible.

**Supplemental information** None.

3. Composition/information on ingredients

Mixtures

| Chemical name                               | Common name and synonyms | CAS number  | %        |
|---|--------------------------|-------------|----------|
| Distillates (Petroleum), Hydrotreated Light |                          | 64742-47-8  | 20 - 40  |
| Asphalt                                     |                          | 8052-42-4   | 10 - 20  |
| Acetone                                     |                          | 67-64-1     | 2.5 - 10 |
| Butane                                      |                          | 106-97-8    | 2.5 - 10 |
| Heptane, branched, cyclic and linear        |                          | 426260-76-6 | 2.5 - 10 |
| Propane                                     |                          | 74-98-6     | 2.5 - 10 |
| Cyclohexane                                 |                          | 110-82-7    | 1 - 2.5  |
| n-Heptane                                   |                          | 142-82-5    | 1 - 2.5  |
| n-Hexane                                    |                          | 110-54-3    | 0.1 - 1  |
| Toluene                                     |                          | 108-88-3    | 0.1 - 1  |
| Other components below reportable levels    |                          |             | 20 - 40  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

|  |   |
|--|---|
| Inhalation   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.   |
| Skin contact   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.   |
| Eye contact  | Rinse with water. Get medical attention if irritation develops and persists.  |
| Ingestion  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.   |
| Most important symptoms/effects, acute and delayed                     | Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain.  |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.  |
| General information  | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |

5. Fire-fighting measures

|   |   |
|---|---|
| Suitable extinguishing media                                  | Alcohol resistant foam. Dry powder. Dry chemicals. Carbon dioxide (CO2).  |
| Unsuitable extinguishing media                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| Specific hazards arising from the chemical                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.   |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| Fire fighting equipment/instructions                          | Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| Specific methods  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.  |
| General fire hazards  | Extremely flammable aerosol.  |

6. Accidental release measures

|   |  |
|---|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.   |
| Methods and materials for containment and cleaning up               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. |
| Environmental precautions   | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.<br>Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.  |

7. Handling and storage

|  |  |
|--|--|
| Precautions for safe handling                                | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | Level 3 Aerosol.<br><br>Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).   |

8. Exposure controls/personal protection

Occupational exposure limits

| US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) |         |            |          |
|---|---------|------------|----------|
| Components  | Type    | Value      |          |
| Acetone (CAS 67-64-1)   | PEL     | 2400 mg/m3 | 1000 ppm |
| Cyclohexane (CAS 110-82-7)  | PEL     | 1050 mg/m3 | 300 ppm  |
| n-Heptane (CAS 142-82-5)  | PEL     | 2000 mg/m3 | 500 ppm  |
| n-Hexane (CAS 110-54-3)   | PEL     | 1800 mg/m3 | 500 ppm  |
| Propane (CAS 74-98-6)   | PEL     | 1800 mg/m3 | 1000 ppm |
| US. OSHA Table Z-2 (29 CFR 1910.1000)                             |         |            |          |
| Components  | Type    | Value      |          |
| Toluene (CAS 108-88-3)  | Ceiling | 300 ppm    |          |
|   | TWA     | 200 ppm    |          |
| US. ACGIH Threshold Limit Values                                  |         |            |          |
| Components  | Type    | Value      | Form     |
| Acetone (CAS 67-64-1)   | STEL    | 500 ppm    |          |
|   | TWA     | 250 ppm    |          |

US. ACGIH Threshold Limit Values

| Components                 | Type | Value     | Form                |
|----------------------------|------|-----------|---------------------|
| Asphalt (CAS 8052-42-4)    | TWA  | 0.5 mg/m3 | Inhalable fraction. |
| Butane (CAS 106-97-8)      | STEL | 1000 ppm  |                     |
| Cyclohexane (CAS 110-82-7) | TWA  | 100 ppm   |                     |
| n-Heptane (CAS 142-82-5)   | STEL | 500 ppm   |                     |
|                            | TWA  | 400 ppm   |                     |
| n-Hexane (CAS 110-54-3)    | TWA  | 50 ppm    |                     |
| Toluene (CAS 108-88-3)     | TWA  | 20 ppm    |                     |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components                 | Type    | Value                  | Form  |
|----------------------------|---------|------------------------|-------|
| Acetone (CAS 67-64-1)      | TWA     | 590 mg/m3<br>250 ppm   | Fume. |
| Asphalt (CAS 8052-42-4)    | Ceiling | 5 mg/m3                |       |
| Butane (CAS 106-97-8)      | TWA     | 1900 mg/m3<br>800 ppm  |       |
| Cyclohexane (CAS 110-82-7) | TWA     | 1050 mg/m3             |       |
|                            |         | 300 ppm                |       |
| n-Heptane (CAS 142-82-5)   | Ceiling | 1800 mg/m3<br>440 ppm  |       |
|                            | TWA     | 350 mg/m3<br>85 ppm    |       |
| n-Hexane (CAS 110-54-3)    | TWA     | 180 mg/m3<br>50 ppm    |       |
| Propane (CAS 74-98-6)      | TWA     | 1800 mg/m3<br>1000 ppm |       |
| Toluene (CAS 108-88-3)     | STEL    | 560 mg/m3<br>150 ppm   |       |
|                            | TWA     | 375 mg/m3<br>100 ppm   |       |

Biological limit values

ACGIH Biological Exposure Indices

| Components              | Value     | Determinant                         | Specimen            | Sampling Time |
|-------------------------|-----------|-------------------------------------|---------------------|---------------|
| Acetone (CAS 67-64-1)   | 25 mg/l   | Acetone                             | Urine               | *             |
| n-Hexane (CAS 110-54-3) | 0.4 mg/l  | 2,5-Hexanedio n, without hydrolysis | Urine               | *             |
| Toluene (CAS 108-88-3)  | 0.3 mg/g  | o-Cresol, with hydrolysis           | Creatinine in urine | *             |
|                         | 0.03 mg/l | Toluene                             | Urine               | *             |
|                         | 0.02 mg/l | Toluene                             | Blood               | *             |

\* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

|                         |                                   |
|-------------------------|-----------------------------------|
| n-Hexane (CAS 110-54-3) | Can be absorbed through the skin. |
| Toluene (CAS 108-88-3)  | Can be absorbed through the skin. |

US - Minnesota Haz Subs: Skin designation applies

|                        |                           |
|------------------------|---------------------------|
| Toluene (CAS 108-88-3) | Skin designation applies. |
|------------------------|---------------------------|

US ACGIH Threshold Limit Values: Skin designation

|                         |                                   |
|-------------------------|-----------------------------------|
| n-Hexane (CAS 110-54-3) | Can be absorbed through the skin. |
|-------------------------|-----------------------------------|

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

|                                |   |
|--------------------------------|---|
| Eye/face protection            | Wear safety glasses with side shields (or goggles).   |
| Skin protection                |   |
| Hand protection                | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.   |
| Other                          | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.  |
| Respiratory protection         | If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.   |
| Thermal hazards                | Wear appropriate thermal protective clothing, when necessary.   |
| General hygiene considerations | Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. Physical and chemical properties

Appearance

|   |  |
|---|--|
| Physical state                          | Gas.                                       |
| Form                                    | Aerosol.                                   |
| Color                                   | Not available.                             |
| Odor                                    | Not available.                             |
| Odor threshold                          | Not available.                             |
| pH                                      | Not available.                             |
| Melting point/freezing point            | Not available.                             |
| Initial boiling point and boiling range | 520.62 °F (271.46 °C) estimated            |
| Flash point                             | -156.0 °F (-104.4 °C) PROPELLANT estimated |
| Evaporation rate                        | Not available.                             |
| Flammability (solid, gas)               | Not available.                             |

Upper/lower flammability or explosive limits

|   |                        |
|---|------------------------|
| Flammability limit - lower (%)          | 1.3 % estimated        |
| Flammability limit - upper (%)          | 9.6 % estimated        |
| Explosive limit - lower (%)             | Not available.         |
| Explosive limit - upper (%)             | Not available.         |
| Vapor pressure                          | 30 psig @70F estimated |
| Vapor density                           | Not available.         |
| Relative density                        | Not available.         |
| Solubility(ies)                         |                        |
| Solubility (water)                      | Not available.         |
| Partition coefficient (n-octanol/water) | Not available.         |
| Auto-ignition temperature               | Not available.         |
| Decomposition temperature               | Not available.         |
| Viscosity                               | Not available.         |

Other information

|                               |                     |
|-------------------------------|---------------------|
| Explosive properties          | Not explosive.      |
| Flame extension               | 20 in estimated     |
| Heat of combustion (NFPA 30B) | 33.2 kJ/g estimated |
| Oxidizing properties          | Not oxidizing.      |
| Specific gravity              | 0.807 estimated     |

VOC (Weight %)24.5 % estimated

10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability                 | Material is stable under normal conditions.   |
| Possibility of hazardous reactions | Hazardous polymerization does not occur.  |
| Conditions to avoid                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| Incompatible materials             | Acids. Strong oxidizing agents.   |
| Hazardous decomposition products   | No hazardous decomposition products are known.  |

11. Toxicological information

Information on likely routes of exposure

|  |  |
|--|--|
| Inhalation   | Harmful if inhaled.  |
| Skin contact   | Causes skin irritation.  |
| Eye contact  | Direct contact with eyes may cause temporary irritation.   |
| Ingestion  | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |
| Symptoms related to the physical, chemical and toxicological characteristics | Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain.                     |

Information on toxicological effects

Acute toxicityMay be fatal if swallowed and enters airways. Harmful if inhaled.

| Components                 | Species    | Test Results   |
|----------------------------|------------|--|
| Acetone (CAS 67-64-1)      |            |  |
| <u>Acute</u><br>Dermal     |            |  |
| LD50                       | Guinea pig | > 7426 mg/kg, 24 Hours<br>> 9.4 ml/kg, 24 Hours      |
|                            | Rabbit     | > 7426 mg/kg, 24 Hours<br>> 9.4 ml/kg, 24 Hours      |
| Inhalation                 |            |  |
| LC50                       | Rat        | 55700 ppm, 3 Hours<br>132 mg/l, 3 Hours<br>50.1 mg/l |
| Oral                       |            |  |
| LD50                       | Rat        | 5800 mg/kg<br>2.2 ml/kg                              |
| Asphalt (CAS 8052-42-4)    |            |  |
| <u>Acute</u><br>Dermal     |            |  |
| LD50                       | Rabbit     | > 2000 mg/kg, 24 Hours                               |
| Inhalation                 |            |  |
| LC50                       | Rat        | > 94.4 mg/m3   |
| Butane (CAS 106-97-8)      |            |  |
| <u>Acute</u><br>Inhalation |            |  |
| LC50                       | Mouse      | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes          |
|                            | Rat        | 1355 mg/l  |

| Components   | Species    | Test Results   |
|--|------------|--|
| Cyclohexane (CAS 110-82-7)                                   |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg   |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 32880 mg/m3, 4 Hours<br>> 5540 ppm, 4 Hours              |
| <b>Oral</b>  |            |  |
| LD50   | Rabbit     | > 5000 mg/kg   |
|  | Rat        | > 5000 mg/kg   |
| Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8) |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg<br>> 2000 mg/kg, 24 Hours                     |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 7.5 mg/l, 6 Hours<br>> 4.6 mg/l, 4 Hours                 |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | > 5000 mg/kg   |
| n-Heptane (CAS 142-82-5)                                     |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg, 24 Hours                                     |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 29.29 mg/l, 4 Hours                                      |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | > 5000 mg/kg   |
| n-Hexane (CAS 110-54-3)                                      |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg, 4 Hours<br>> 5 ml/kg, 4 Hours                |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 5000 ppm, 24 Hours<br>> 31.86 mg/l<br>73860 ppm, 4 Hours |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | 24 ml/kg<br>24 g/kg  |
|  | Wistar rat | 49 g/kg  |
| Propane (CAS 74-98-6)  |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Inhalation</b>  |            |  |
| LC50   | Mouse      | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes                |
|  | Rat        | 1355 mg/l<br>658 mg/l/4h                                   |

| Components             | Species | Test Results             |
|------------------------|---------|--------------------------|
| Toluene (CAS 108-88-3) |         |                          |
| <u>Acute</u>           |         |                          |
| <b>Dermal</b>          |         |                          |
| LD50                   | Rabbit  | > 5000 mg/kg, 24 Hours   |
| <b>Inhalation</b>      |         |                          |
| LC50                   | Mouse   | 6405 - 7436 ppm, 6 Hours |
|                        |         | 5320 ppm, 8 Hours        |
|                        | Rat     | 5879 - 6281 ppm, 6 Hours |
|                        |         | 25.7 mg/l, 4 Hours       |
| <b>Oral</b>            |         |                          |
| LD50                   | Rat     | > 5000 mg/kg             |

\* Estimates for product may be based on additional component data not shown.

|   |  |
|---|--|
| <b>Skin corrosion/irritation</b>                                      | Causes skin irritation.  |
| <b>Serious eye damage/eye irritation</b>                              | Direct contact with eyes may cause temporary irritation.   |
| <b>Respiratory or skin sensitization</b>                              |  |
| <b>Respiratory sensitization</b>                                      | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | Risk of cancer cannot be excluded with prolonged exposure.   |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |  |
| Asphalt (CAS 8052-42-4)   | 2B Possibly carcinogenic to humans.  |
| Toluene (CAS 108-88-3)  | 3 Not classifiable as to carcinogenicity to humans.  |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
| Not regulated.  |  |
| <b>US. National Toxicology Program (NTP) Report on Carcinogens</b>    |  |
| Not listed.   |  |
| <b>Reproductive toxicity</b>  | Suspected of damaging fertility. Suspected of damaging the unborn child.   |
| <b>Specific target organ toxicity - single exposure</b>               | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b>             | Not classified.  |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>  | Prolonged exposure may cause chronic effects.  |

12. Ecological information

| Ecotoxicity  |      | Toxic to aquatic life with long lasting effects.    |                              |
|--|------|---|------------------------------|
| Components   |      | Species   | Test Results                 |
| Acetone (CAS 67-64-1)  |      |   |                              |
| Aquatic  |      |   |                              |
| Crustacea  | EC50 | Water flea (Daphnia magna)                          | 21.6 - 23.9 mg/l, 48 hours   |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours   |
| Cyclohexane (CAS 110-82-7)                                   |      |   |                              |
| Aquatic  |      |   |                              |
| Fish   | LC50 | Fathead minnow (Pimephales promelas)                | 23.03 - 42.07 mg/l, 96 hours |
| Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8) |      |   |                              |
| Aquatic  |      |   |                              |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.9 mg/l, 96 hours           |

| Components               |      | Species  | Test Results                 |
|--------------------------|------|--|------------------------------|
| n-Heptane (CAS 142-82-5) |      |  |                              |
| Aquatic                  |      |  |                              |
| Fish                     | LC50 | Mozambique tilapia (Tilapia mossambica)          | 375 mg/l, 96 hours           |
| n-Hexane (CAS 110-54-3)  |      |  |                              |
| Aquatic                  |      |  |                              |
| Fish                     | LC50 | Fathead minnow (Pimephales promelas)             | 2.101 - 2.981 mg/l, 96 hours |
| Toluene (CAS 108-88-3)   |      |  |                              |
| Aquatic                  |      |  |                              |
| Algae                    | IC50 | Algae  | 433.0001 mg/L, 72 Hours      |
| Crustacea                | EC50 | Daphnia  | 7.645 mg/L, 48 Hours         |
|                          |      | Water flea (Daphnia magna)                       | 5.46 - 9.83 mg/l, 48 hours   |
| Fish                     | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch) | 8.11 mg/l, 96 hours          |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

|             |       |
|-------------|-------|
| Acetone     | -0.24 |
| Butane      | 2.89  |
| Cyclohexane | 3.44  |
| n-Heptane   | 4.66  |
| n-Hexane    | 3.9   |
| Propane     | 2.36  |
| Toluene     | 2.73  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.  |

14. Transport information

|                              |   |
|------------------------------|---|
| DOT                          |   |
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable, (each not exceeding 1 L capacity)  |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |

|                      |      |
|----------------------|------|
| Special provisions   | N82  |
| Packaging exceptions | 306  |
| Packaging non bulk   | None |
| Packaging bulk       | None |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable   |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Environmental hazards        | Yes   |
| ERG Code                     | 10L   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Other information            |   |
| Passenger and cargo aircraft | Allowed with restrictions.  |
| Cargo aircraft only          | Allowed with restrictions.  |
| Packaging Exceptions         | LTD QTY   |

IMDG

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | AEROSOLS  |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Environmental hazards        |   |
| Marine pollutant             | Yes   |
| EmS                          | F-D, S-U  |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Packaging Exceptions         | LTD QTY   |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

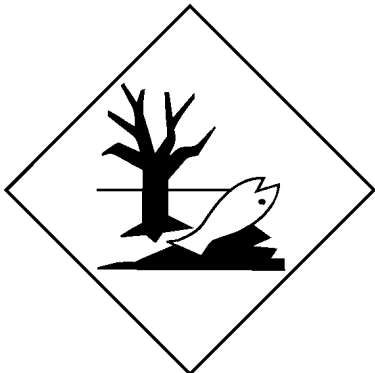
DOT



IATA; IMDG



Marine pollutant



General information

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

|                            |         |
|----------------------------|---------|
| Acetone (CAS 67-64-1)      | Listed. |
| Cyclohexane (CAS 110-82-7) | Listed. |
| n-Hexane (CAS 110-54-3)    | Listed. |
| Toluene (CAS 108-88-3)     | Listed. |

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| Cyclohexane   | 110-82-7   | 1 - 2.5  |
| n-Hexane      | 110-54-3   | 0.1 - 1  |
| Toluene       | 108-88-3   | 0.1 - 1  |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

n-Hexane (CAS 110-54-3)  
Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

|                        |      |
|------------------------|------|
| Acetone (CAS 67-64-1)  | 6532 |
| Toluene (CAS 108-88-3) | 6594 |

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

|                        |        |
|------------------------|--------|
| Acetone (CAS 67-64-1)  | 35 %WV |
| Toluene (CAS 108-88-3) | 35 %WV |

DEA Exempt Chemical Mixtures Code Number

|                        |      |
|------------------------|------|
| Acetone (CAS 67-64-1)  | 6532 |
| Toluene (CAS 108-88-3) | 594  |

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

- Acetone (CAS 67-64-1)
- Asphalt (CAS 8052-42-4)
- Butane (CAS 106-97-8)
- n-Hexane (CAS 110-54-3)
- Toluene (CAS 108-88-3)

US. Massachusetts RTK - Substance List

- Acetone (CAS 67-64-1)
- Asphalt (CAS 8052-42-4)
- Butane (CAS 106-97-8)
- Cyclohexane (CAS 110-82-7)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- Propane (CAS 74-98-6)
- Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

- Acetone (CAS 67-64-1)
- Asphalt (CAS 8052-42-4)
- Butane (CAS 106-97-8)
- Cyclohexane (CAS 110-82-7)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- Propane (CAS 74-98-6)
- Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

- Acetone (CAS 67-64-1)
- Asphalt (CAS 8052-42-4)
- Butane (CAS 106-97-8)
- Cyclohexane (CAS 110-82-7)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- Propane (CAS 74-98-6)
- Toluene (CAS 108-88-3)

US. Rhode Island RTK

- Acetone (CAS 67-64-1)
- Butane (CAS 106-97-8)
- Cyclohexane (CAS 110-82-7)
- n-Hexane (CAS 110-54-3)
- Propane (CAS 74-98-6)
- Toluene (CAS 108-88-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

|                        |                         |
|------------------------|-------------------------|
| Toluene (CAS 108-88-3) | Listed: January 1, 1991 |
|------------------------|-------------------------|

International Inventories

| Country(s) or region   | Inventory name   | On inventory (yes/no)* |
|--|--|------------------------|
| Australia  | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada   | Domestic Substances List (DSL)   | Yes                    |
| Canada   | Non-Domestic Substances List (NDSL)                                    | No                     |
| China  | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe   | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe   | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan  | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea  | Existing Chemicals List (ECL)  | No                     |
| New Zealand  | New Zealand Inventory  | No                     |
| Philippines  | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico  | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |
| *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)<br>A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s). |  |                        |

16. Other information, including date of preparation or last revision

|                      |   |
|----------------------|---|
| Issue date           | 06-17-2016  |
| Revision date        | 09-29-2016  |
| Version #            | 02  |
| Disclaimer           | We cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety.   |

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000036041  
**Product identifier** 11.5 OZ MACS DEICER 7000 LT 12PK  
**Company information** NAPA BALKAMP  
2601 Stout Heritage Parkway  
Plainfield, IN 46168 United States  
**Company phone** General Assistance 1-317-754-3900  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** Not available.  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Serious eye damage/eye irritation Category 2  
Specific target organ toxicity, single exposure Category 3 narcotic effects  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol. Causes serious eye irritation. May cause drowsiness or dizziness.  
**Precautionary statement**  
**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.  
**Response** If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.  
**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %        |
|--|--------------------------|------------|----------|
| Isopropyl Alcohol                        |                          | 67-63-0    | 40 - 60  |
| Carbon Dioxide                           |                          | 124-38-9   | 2.5 - 10 |
| Ethylene Glycol                          |                          | 107-21-1   | 2.5 - 10 |
| Other components below reportable levels |                          |            | 20 - 40  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.   |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Ingestion</b>  | In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.                              |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Alcohol resistant foam. Powder. Carbon dioxide (CO <sub>2</sub> ).   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.  |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.   |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol.   |

## 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.  |

## 7. Handling and storage

|                                      |  |
|--------------------------------------|--|
| <b>Precautions for safe handling</b> | Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|--------------------------------------|--|

**Conditions for safe storage, including any incompatibilities**

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                      | Type | Value                            |
|---------------------------------|------|----------------------------------|
| Carbon Dioxide (CAS 124-38-9)   | PEL  | 9000 mg/m3                       |
| Isopropyl Alcohol (CAS 67-63-0) | PEL  | 5000 ppm<br>980 mg/m3<br>400 ppm |

**US. ACGIH Threshold Limit Values**

| Components                      | Type           | Value                 | Form     |
|---------------------------------|----------------|-----------------------|----------|
| Carbon Dioxide (CAS 124-38-9)   | STEL           | 30000 ppm             |          |
| Ethylene Glycol (CAS 107-21-1)  | TWA<br>Ceiling | 5000 ppm<br>100 mg/m3 | Aerosol. |
| Isopropyl Alcohol (CAS 67-63-0) | STEL<br>TWA    | 400 ppm<br>200 ppm    |          |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                      | Type        | Value   |
|---------------------------------|-------------|---|
| Carbon Dioxide (CAS 124-38-9)   | STEL        | 54000 mg/m3                                   |
|                                 | TWA         | 30000 ppm<br>9000 mg/m3<br>5000 ppm           |
| Isopropyl Alcohol (CAS 67-63-0) | STEL<br>TWA | 1225 mg/m3<br>500 ppm<br>980 mg/m3<br>400 ppm |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components                      | Value   | Determinant | Specimen | Sampling Time |
|---------------------------------|---------|-------------|----------|---------------|
| Isopropyl Alcohol (CAS 67-63-0) | 40 mg/l | Acetone     | Urine    | *             |

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear suitable protective clothing.

**Respiratory protection**

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

|                                       |  |
|---------------------------------------|--|
| <b>Thermal hazards</b>                | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b> | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and chemical properties

### Appearance

|  |                             |
|--|-----------------------------|
| <b>Physical state</b>                          | Gas.                        |
| <b>Form</b>                                    | Aerosol.                    |
| <b>Color</b>                                   | Not available.              |
| <b>Odor</b>                                    | Not available.              |
| <b>Odor threshold</b>                          | Not available.              |
| <b>pH</b>                                      | Not available.              |
| <b>Melting point/freezing point</b>            | Not available.              |
| <b>Initial boiling point and boiling range</b> | 212 °F (100 °C) estimated   |
| <b>Flash point</b>                             | 63.6 °F (17.6 °C) estimated |
| <b>Evaporation rate</b>                        | Not available.              |
| <b>Flammability (solid, gas)</b>               | Not available.              |

### Upper/lower flammability or explosive limits

|  |                               |
|--|-------------------------------|
| <b>Flammability limit - lower (%)</b>          | 2.5 % estimated               |
| <b>Flammability limit - upper (%)</b>          | 12 % estimated                |
| <b>Explosive limit - lower (%)</b>             | Not available.                |
| <b>Explosive limit - upper (%)</b>             | Not available.                |
| <b>Vapor pressure</b>                          | 110 - 130 psig @20C estimated |
| <b>Vapor density</b>                           | Not available.                |
| <b>Relative density</b>                        | 15.859 estimated              |
| <b>Solubility(ies)</b>                         |                               |
| <b>Solubility (water)</b>                      | Not available.                |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.                |
| <b>Auto-ignition temperature</b>               | 797 °F (425 °C) estimated     |
| <b>Decomposition temperature</b>               | Not available.                |
| <b>Viscosity</b>                               | Not available.                |

### Other information

|                                      |                      |
|--------------------------------------|----------------------|
| <b>Explosive properties</b>          | Not explosive.       |
| <b>Heat of combustion (NFPA 30B)</b> | 15.83 kJ/g estimated |
| <b>Oxidizing properties</b>          | Not oxidizing.       |
| <b>Specific gravity</b>              | 0.897 estimated      |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Isocyanates. Chlorine.   |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful. |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.   |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.   |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. |
|---|---|

### Information on toxicological effects

|                       |                   |
|-----------------------|-------------------|
| <b>Acute toxicity</b> | Narcotic effects. |
|-----------------------|-------------------|

| Components                      | Species | Test Results         |
|---------------------------------|---------|----------------------|
| Ethylene Glycol (CAS 107-21-1)  |         |                      |
| <b>Acute</b>                    |         |                      |
| <b>Dermal</b>                   |         |                      |
| LD50                            | Mouse   | > 3500 mg/kg         |
| <b>Inhalation</b>               |         |                      |
| LC50                            | Rat     | > 2.5 mg/l, 6 Hours  |
| <b>Oral</b>                     |         |                      |
| LD50                            | Rat     | 7712 mg/kg           |
| Isopropyl Alcohol (CAS 67-63-0) |         |                      |
| <b>Acute</b>                    |         |                      |
| <b>Dermal</b>                   |         |                      |
| LD50                            | Rabbit  | 16.4 ml/kg, 24 Hours |
| <b>Inhalation</b>               |         |                      |
| LC50                            | Rat     | > 10000 ppm, 6 Hours |
| <b>Oral</b>                     |         |                      |
| LD50                            | Rat     | 5.84 g/kg            |

\* Estimates for product may be based on additional component data not shown.

|                                  |  |
|----------------------------------|--|
| <b>Skin corrosion/irritation</b> | Prolonged skin contact may cause temporary irritation. |
|----------------------------------|--|

|  |                                |
|--|--------------------------------|
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation. |
|--|--------------------------------|

### Respiratory or skin sensitization

|                                  |                               |
|----------------------------------|-------------------------------|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer. |
|----------------------------------|-------------------------------|

|                           |   |
|---------------------------|---|
| <b>Skin sensitization</b> | This product is not expected to cause skin sensitization. |
|---------------------------|---|

|                               |  |
|-------------------------------|--|
| <b>Germ cell mutagenicity</b> | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
|-------------------------------|--|

|                        |   |
|------------------------|---|
| <b>Carcinogenicity</b> | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
|------------------------|---|

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

|                              |  |
|------------------------------|--|
| <b>Reproductive toxicity</b> | This product is not expected to cause reproductive or developmental effects. |
|------------------------------|--|

|   |                                     |
|---|-------------------------------------|
| <b>Specific target organ toxicity - single exposure</b> | May cause drowsiness and dizziness. |
|---|-------------------------------------|

|   |                 |
|---|-----------------|
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified. |
|---|-----------------|

|                          |   |
|--------------------------|---|
| <b>Aspiration hazard</b> | Not likely, due to the form of the product. |
|--------------------------|---|

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components                      |      | Species                              | Test Results             |
|---------------------------------|------|--------------------------------------|--------------------------|
| Ethylene Glycol (CAS 107-21-1)  |      |                                      |                          |
| Aquatic                         |      |                                      |                          |
| Crustacea                       | EC50 | Daphnia                              | 46300 mg/L, 48 Hours     |
| Fish                            | LC50 | Fathead minnow (Pimephales promelas) | 8050 mg/l, 96 hours      |
| Isopropyl Alcohol (CAS 67-63-0) |      |                                      |                          |
| Aquatic                         |      |                                      |                          |
| Algae                           | IC50 | Algae                                | 1000.0001 mg/L, 72 Hours |
| Crustacea                       | EC50 | Daphnia                              | 13299 mg/L, 48 Hours     |
| Fish                            | LC50 | Bluegill (Lepomis macrochirus)       | > 1400 mg/l, 96 hours    |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

|                   |       |
|-------------------|-------|
| Ethylene Glycol   | -1.36 |
| Isopropyl Alcohol | 0.05  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1993  |
| <b>UN proper shipping name</b>      | Flammable liquids, n.o.s. (Isopropyl Alcohol)                           |
| <b>Transport hazard class(es)</b>   |   |
| Class                               | 3   |
| Subsidiary risk                     | -   |
| Label(s)                            | 3   |
| <b>Packing group</b>                | II  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | IB2, T7, TP1, TP8, TP28   |
| <b>Packaging exceptions</b>         | 150   |
| <b>Packaging non bulk</b>           | 202   |
| <b>Packaging bulk</b>               | 242   |

### IATA

|                                |  |
|--------------------------------|--|
| <b>UN number</b>               | UN1993                                       |
| <b>UN proper shipping name</b> | Flammable liquid, n.o.s. (Isopropyl Alcohol) |

**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** II**Environmental hazards** No.**ERG Code** 3H**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.**Other information****Passenger and cargo aircraft** Allowed with restrictions.**Cargo aircraft only** Allowed with restrictions.**IMDG****UN number** UN1993**UN proper shipping name** FLAMMABLE LIQUID, N.O.S. (Isopropyl Alcohol)**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** II**Environmental hazards****Marine pollutant** No**EmS** F-E, S-E**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.**DOT****IATA; IMDG****General information**

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Ethylene Glycol (CAS 107-21-1)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

| Chemical name   | CAS number | % by wt. |
|-----------------|------------|----------|
| Ethylene Glycol | 107-21-1   | 2.5 - 10 |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Ethylene Glycol (CAS 107-21-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Massachusetts RTK - Substance List**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Rhode Island RTK**

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Ethylene Glycol (CAS 107-21-1)

Listed: June 19, 2015

**International Inventories**

| Country(s) or region | Inventory name   | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia            | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada               | Domestic Substances List (DSL)   | Yes                    |
| Canada               | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe               | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |

| Country(s) or region        | Inventory name  | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Europe                      | European List of Notified Chemical Substances (ELINCS)            | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)          | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                     | Yes                    |
| New Zealand                 | New Zealand Inventory   | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                     | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-26-2018

**Version #** 01

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Trade name : MASTER 25% STARTING FLUID 11 OZ.  
Product code : SF-16

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Starting Fluid

### 1.3. Details of the supplier of the safety data sheet

Master Chemical  
4635 Willow Drive  
Medina, MN 55340 - USA  
T: 612-478-2360

### 1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification (GHS-US)

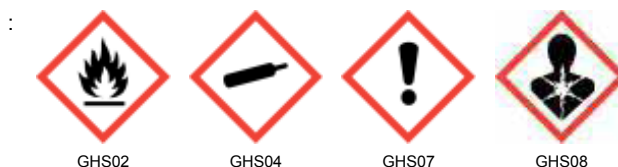
Flam. Aerosol 1 H222  
Compressed gas H280  
Skin Irrit. 2 H315  
Muta. 1B H340  
Carc. 1A H350  
Repr. 2 H361  
STOT SE 3 H336  
STOT RE 2 H373

Full text of H-phrases: see section 16

### 2.2. Label elements

#### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H222 - Extremely flammable aerosol  
H280 - Contains gas under pressure; may explode if heated  
H315 - Causes skin irritation  
H336 - May cause drowsiness or dizziness  
H340 - May cause genetic defects  
H350 - May cause cancer  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P201 - Obtain special instructions  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking  
P211 - Do not spray on an open flame or other ignition source  
P251 - Pressurized container: Do not pierce or burn, even after use  
P260 - Do not breathe dust, fumes, gas, mist, vapor spray  
P261 - Avoid breathing dust, fume, gas, mist, vapor spray  
P264 - Wash affected areas thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves, protective clothing, eye protection, face protection  
P302+P352 - If on skin: Wash with plenty of soap and water  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.  
P314 - Get medical advice/attention if you feel unwell  
P321 - Specific treatment: See section 4.1 on this label  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P405 - Store locked up  
P410+P403 - Protect from sunlight. Store in a well-ventilated place  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

### 2.3. Other hazards

Other hazards not contributing to the classification : Contains gas under pressure; may explode if heated.

### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name   | Product identifier   | %               | Classification (GHS-US)   |
|--|----------------------|-----------------|---|
| Heptane, branched cyclic                               | (CAS No) 426260-76-6 | 44.64 - 46.5    | Flam. Liq. 1, H224<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412                          |
| diethyl ether  | (CAS No) 60-29-7     | 10 - 30         | Flam. Liq. 1, H224<br>Acute Tox. 4 (Oral), H302   |
| Petroleum gases, liquefied, sweetened                  | (CAS No) 68476-86-8  | 10 - 30         | Flam. Gas 1, H220<br>Flam. Liq. 1, H224<br>Muta. 1B, H340<br>Carc. 1A, H350   |
| heptane  | (CAS No) 142-82-5    | 11.625 - 20.925 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| carbon dioxide, liquefied, under pressure              | (CAS No) 124-38-9    | 5 - 10          | Compressed gas, H280  |
| Toluene  | (CAS No) 108-88-3    | 0.465 - 1.86    | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Repr. 2, H361<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304                 |
| distillates (petroleum), hydrotreated heavy naphthenic | (CAS No) 64742-52-5  | < 1             | Not classified  |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Cough. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment: See section 4.1 on this label.

First-aid measures after eye contact : Direct contact with the eyes is likely to be irritating. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation : Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable liquid and vapor. Extremely flammable aerosol.
- Explosion hazard : May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Aerosol level 3.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Safety glasses.
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust,fume,gas,mist,vapor spray.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- For containment : Dam up the liquid spill.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.
- Precautions for safe handling : No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust,fume,gas,mist,vapor spray. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash affected areas thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment . Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: ignition sources. heat sources.
- Storage area : Store in a well-ventilated place.

### 7.3. Specific end use(s)

Follow Label Directions.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| diethyl ether (60-29-7) |                   |      |
|-------------------------|-------------------|------|
| USA ACGIH               | ACGIH TWA (mg/m³) | 1200 |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| diethyl ether (60-29-7) |                                     |                        |
|-------------------------|-------------------------------------|------------------------|
| USA ACGIH               | ACGIH TWA (ppm)                     | 400 ppm                |
| USA ACGIH               | ACGIH STEL (mg/m <sup>3</sup> )     | 1500 mg/m <sup>3</sup> |
| USA ACGIH               | ACGIH STEL (ppm)                    | 500 ppm                |
| USA OSHA                | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1200 mg/m <sup>3</sup> |
| USA OSHA                | OSHA PEL (TWA) (ppm)                | 400 ppm                |

| Toluene (108-88-3) |                                 |                      |
|--------------------|---------------------------------|----------------------|
| USA ACGIH          | ACGIH TWA (mg/m <sup>3</sup> )  | 37 mg/m <sup>3</sup> |
| USA ACGIH          | ACGIH TWA (ppm)                 | 10 ppm               |
| USA ACGIH          | ACGIH STEL (mg/m <sup>3</sup> ) | 560                  |
| USA ACGIH          | ACGIH STEL (ppm)                | 150 ppm              |
| USA ACGIH          | ACGIH Ceiling (ppm)             | 500 ppm              |
| USA OSHA           | OSHA PEL (TWA) (ppm)            | 200 ppm              |
| USA OSHA           | OSHA PEL (Ceiling) (ppm)        | 300 ppm              |

| heptane (142-82-5) |                  |         |
|--------------------|------------------|---------|
| USA ACGIH          | ACGIH TWA (ppm)  | 400 ppm |
| USA ACGIH          | ACGIH STEL (ppm) | 400 ppm |

| Heptane, branched cyclic (426260-76-6) |                      |         |
|--|----------------------|---------|
| USA ACGIH                              | ACGIH TWA (ppm)      | 400 ppm |
| USA ACGIH                              | ACGIH STEL (ppm)     | 500 ppm |
| USA OSHA                               | OSHA PEL (TWA) (ppm) | 500 ppm |

| Petroleum gases, liquefied, sweetened (68476-86-8) |                                     |  |
|--|-------------------------------------|--|
| USA ACGIH  | ACGIH TWA (ppm)                     | 1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4 |
| USA OSHA   | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1800 mg/m <sup>3</sup>   |
| USA OSHA   | OSHA PEL (TWA) (ppm)                | 1000 ppm   |

| carbon dioxide, liquefied, under pressure (124-38-9) |                                     |                        |
|--|-------------------------------------|------------------------|
| USA ACGIH  | ACGIH TWA (mg/m <sup>3</sup> )      | 9000 mg/m <sup>3</sup> |
| USA ACGIH  | ACGIH TWA (ppm)                     | 5000 ppm               |
| USA ACGIH  | ACGIH STEL (mg/m <sup>3</sup> )     | 54000                  |
| USA ACGIH  | ACGIH STEL (ppm)                    | 30000 ppm              |
| USA OSHA   | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 9000 mg/m <sup>3</sup> |
| USA OSHA   | OSHA PEL (TWA) (ppm)                | 5000 ppm               |

### 8.2. Exposure controls

Appropriate engineering controls

: Local exhaust ventilation, vent hoods.

Personal protective equipment

: Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information

: Do not eat, drink or smoke during use.

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|   |   |
|---|---|
| Physical state                              | : Gas   |
| Appearance                                  | : Colorless to pale yellow liquid.                          |
| Color                                       | : Colourless to light yellow.                               |
| Odor  | : Sweet.  |
| Odor threshold                              | : No data available   |
| pH  | : No data available   |
| Relative evaporation rate (butyl acetate=1) | : No data available   |
| Melting point                               | : No data available   |
| Freezing point                              | : No data available   |
| Boiling point                               | : -42 °C (LOWEST COMPONENT)                                 |
| Flash point                                 | : < -23 °C  |
| Auto-ignition temperature                   | : 180 °C (LOWEST COMPONENT)                                 |
| Decomposition temperature                   | : No data available   |
| Flammability (solid, gas)                   | : No data available   |
| Vapor pressure                              | : No data available   |
| Relative vapor density at 20 °C             | : > 1.5   |
| Relative density                            | : No data available   |
| Solubility                                  | : Poorly soluble in water.                                  |
| Log Pow                                     | : No data available   |
| Log Kow                                     | : No data available   |
| Viscosity, kinematic                        | : No data available   |
| Viscosity, dynamic                          | : No data available   |
| Explosive properties                        | : Heating may cause an explosion. Heating may cause a fire. |
| Oxidizing properties                        | : No data available   |
| Explosive limits                            | : No data available   |

#### 9.2. Other information

|             |                          |
|-------------|--------------------------|
| VOC content | : 93.3 % CARB METHOD 310 |
|-------------|--------------------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Extremely flammable liquid and vapor. May form flammable/explosive vapor-air mixture. Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

May release flammable gases. Toxic fume. . Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

|                |                  |
|----------------|------------------|
| Acute toxicity | : Not classified |
|----------------|------------------|

| diethyl ether (60-29-7)    |   |
|----------------------------|---|
| LD50 oral rat              | 1215 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1600 mg/kg bodyweight; Rat) |
| LD50 dermal rabbit         | > 14200 mg/kg (Rabbit)  |
| LC50 inhalation rat (mg/l) | 99 mg/l/4h (Rat)  |
| LC50 inhalation rat (ppm)  | 32000 ppm/4h (Rat)  |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| <b>Toluene (108-88-3)</b>  |  |
|----------------------------|--|
| LD50 oral rat              | 5580 mg/kg body weight   |
| LD50 dermal rabbit         | > 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87) |
| LC50 inhalation rat (mg/l) | > 28.1 mg/l/4h (Rat; Air, Literature study)  |

| <b>heptane (142-82-5)</b>  |   |
|----------------------------|---|
| LD50 oral rat              | > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)      |
| LD50 dermal rabbit         | > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) |
| LC50 inhalation rat (mg/l) | 103 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)  | 25000 ppm/4h (Rat; Literature study)  |

| <b>Heptane, branched cyclic (426260-76-6)</b> |   |
|---|---|
| LD50 oral rat                                 | > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)      |
| LD50 dermal rabbit                            | > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) |
| LC50 inhalation rat (mg/l)                    | 103 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)                     | 25000 ppm/4h (Rat; Literature study)  |

|                                   |  |
|-----------------------------------|--|
| Skin corrosion/irritation         | : Causes skin irritation.  |
| Serious eye damage/irritation     | : Not classified   |
| Respiratory or skin sensitization | : Not classified   |
| Germ cell mutagenicity            | : May cause genetic defects.Based on available data, the classification criteria are not met |
| Carcinogenicity                   | : May cause cancer.  |

| <b>Toluene (108-88-3)</b> |   |
|---------------------------|---|
| IARC group                | 3 |

| <b>distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)</b> |   |
|--|---|
| IARC group   | 3 |

|   |   |
|---|---|
| Reproductive toxicity                               | : Suspected of damaging fertility or the unborn child.Based on available data, the classification criteria are not met  |
| Specific target organ toxicity (single exposure)    | : May cause drowsiness or dizziness.  |
| Specific target organ toxicity (repeated exposure)  | : May cause damage to organs through prolonged or repeated exposure.Based on available data, the classification criteria are not met<br>May cause damage to organs through prolonged or repeated exposure |
| Aspiration hazard                                   | : Not classifiedBased on available data, the classification criteria are not met  |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met.   |
| Symptoms/injuries after inhalation                  | : Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.   |
| Symptoms/injuries after skin contact                | : Causes skin irritation.   |

## SECTION 12: Ecological information

### 12.1. Toxicity

| <b>diethyl ether (60-29-7)</b> |   |
|--------------------------------|---|
| LC50 fish 1                    | > 10000 ppm (96 h; Lepomis macrochirus) |
| EC50 Daphnia 1                 | 165 mg/l (24 h; Daphnia magna)          |
| LC50 fish 2                    | 2560 mg/l (96 h; Pimephales promelas)   |
| EC50 Daphnia 2                 | 1380 mg/l (48 h; Daphnia magna)         |
| TLM fish 1                     | > 1000 mg/l (96 h; Pisces)              |
| TLM other aquatic organisms 1  | > 1000 mg/l (96 h)                      |

| <b>Toluene (108-88-3)</b> |  |
|---------------------------|--|
| LC50 fish 1               | 24 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)        |
| EC50 Daphnia 1            | 84 mg/l (24 h; Daphnia magna; Locomotor effect)            |
| LC50 fish 2               | 13 mg/l (96 h; Lepomis macrochirus)                        |
| EC50 Daphnia 2            | 11.5 - 19.6 mg/l (48 h; Daphnia magna)                     |
| Threshold limit algae 1   | > 400 mg/l (168 h; Scenedesmus quadricauda; Toxicity test) |
| Threshold limit algae 2   | 105 mg/l (192 h; Microcystis aeruginosa)                   |

| <b>heptane (142-82-5)</b> |   |
|---------------------------|---|
| LC50 fish 1               | 375 mg/l (96 h; Tilapia mosambica; Nominal concentration) |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| heptane (142-82-5)                        |   |
|---|---|
| LC50 other aquatic organisms 1            | > 1000 mg/l (96 h)                                  |
| EC50 Daphnia 1                            | 1.5 mg/l (48 h; Daphnia magna)                      |
| LC50 fish 2                               | > 100 mg/l (96 h; Oncorhynchus kisutch)             |
| TLM fish 1                                | 4924 mg/l (48 h; Gambusia affinis)                  |
| Threshold limit other aquatic organisms 1 | > 1000 mg/l (96 h)                                  |
| Threshold limit algae 1                   | > 200 mg/l (Scenedesmus quadricauda; Toxicity test) |
| Threshold limit algae 2                   | 1.5 mg/l (8 h; Algae; Photosynthesis)               |

| carbon dioxide, liquefied, under pressure (124-38-9) |   |
|--|---|
| LC50 fish 1  | 35 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)       |
| LC50 fish 2  | 60 - 240 mg/l (12 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal) |

### 12.2. Persistence and degradability

| MASTER 25% STARTING FLUID 11 OZ. |                  |
|----------------------------------|------------------|
| Persistence and degradability    | Not established. |

| diethyl ether (60-29-7)         |  |
|---------------------------------|--|
| Persistence and degradability   | Not readily biodegradable in water. No (test)data on mobility of the substance available. Reacts with air. |
| Biochemical oxygen demand (BOD) | 0.03 g O <sub>2</sub> /g substance   |
| Chemical oxygen demand (COD)    | 0.026 g O <sub>2</sub> /g substance (KMnO <sub>4</sub> )   |
| ThOD                            | 2.60 g O <sub>2</sub> /g substance   |
| BOD (% of ThOD)                 | 0.012 % ThOD   |

| Toluene (108-88-3)              |  |
|---------------------------------|--|
| Persistence and degradability   | Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil. |
| Biochemical oxygen demand (BOD) | 2.15 g O <sub>2</sub> /g substance   |
| Chemical oxygen demand (COD)    | 2.52 g O <sub>2</sub> /g substance   |
| ThOD                            | 3.13 g O <sub>2</sub> /g substance   |
| BOD (% of ThOD)                 | 0.69 % ThOD  |

| heptane (142-82-5)              |   |
|---------------------------------|---|
| Persistence and degradability   | Readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil. |
| Biochemical oxygen demand (BOD) | 1.92 g O <sub>2</sub> /g substance  |
| Chemical oxygen demand (COD)    | 0.06 g O <sub>2</sub> /g substance  |
| ThOD                            | 3.52 g O <sub>2</sub> /g substance  |
| BOD (% of ThOD)                 | > % ThOD (5 day(s)) > 0.5   |

| Heptane, branched cyclic (426260-76-6) |   |
|--|---|
| Persistence and degradability          | May cause long-term adverse effects in the environment. |

| Petroleum gases, liquefied, sweetened (68476-86-8) |                  |
|--|------------------|
| Persistence and degradability                      | Not established. |

| carbon dioxide, liquefied, under pressure (124-38-9) |   |
|--|---|
| Persistence and degradability                        | Biodegradability: not applicable. No (test)data on mobility of the substance available. |
| Biochemical oxygen demand (BOD)                      | Not applicable  |
| Chemical oxygen demand (COD)                         | Not applicable  |
| ThOD   | Not applicable  |
| BOD (% of ThOD)                                      | Not applicable  |

### 12.3. Bioaccumulative potential

| MASTER 25% STARTING FLUID 11 OZ. |                  |
|----------------------------------|------------------|
| Bioaccumulative potential        | Not established. |

| diethyl ether (60-29-7)   |   |
|---------------------------|---|
| BCF fish 1                | 0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) |
| Log Pow                   | 0.82 - 0.89 (Experimental value)                    |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500).      |

| Toluene (108-88-3)            |   |
|-------------------------------|---|
| BCF fish 1                    | 13.2 (Anguilla japonica)                |
| BCF fish 2                    | 90 (72 h; Leuciscus idus)               |
| BCF other aquatic organisms 1 | 380 (24 h; Chlorella sp.; Fresh weight) |
| BCF other aquatic organisms 2 | 4.2 (Mytilus edulis; Fresh weight)      |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|   |   |
|---|---|
| <b>Toluene (108-88-3)</b>                                   |   |
| Log Pow   | 2.73 (Experimental value; Other; 20 °C)                           |
| Bioaccumulative potential                                   | Low potential for bioaccumulation (BCF < 500).                    |
| <b>heptane (142-82-5)</b>                                   |   |
| BCF other aquatic organisms 1                               | 552   |
| Log Pow   | 4.66 (Experimental value; 4.5; Literature)                        |
| Bioaccumulative potential                                   | Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ). |
| <b>Heptane, branched cyclic (426260-76-6)</b>               |   |
| Bioaccumulative potential                                   | Not established.  |
| <b>Petroleum gases, liquefied, sweetened (68476-86-8)</b>   |   |
| Bioaccumulative potential                                   | Not established.  |
| <b>carbon dioxide, liquefied, under pressure (124-38-9)</b> |   |
| Log Pow   | 0.83 (Experimental value)   |
| Bioaccumulative potential                                   | Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).       |

### 12.4. Mobility in soil

|                                |                   |
|--------------------------------|-------------------|
| <b>diethyl ether (60-29-7)</b> |                   |
| Surface tension                | 0.017 N/m (20 °C) |
| <b>Toluene (108-88-3)</b>      |                   |
| Surface tension                | 0.03 N/m (20 °C)  |
| <b>heptane (142-82-5)</b>      |                   |
| Surface tension                | 0.020 N/m (20 °C) |

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

### 14.2. UN proper shipping name

DOT Proper Shipping Name : Aerosols  
flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)

Department of Transportation (DOT) Hazard Classes : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : 304

DOT Packaging Bulk (49 CFR 173.xxx) : None

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 14.3. Additional information

Other information : No supplementary information available.

### Overland transport

No additional information available

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other : 48 - Stow "away from" sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : Forbidden  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg  
CFR 175.75)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### MASTER 25% STARTING FLUID 11 OZ.

|                                     |  |
|-------------------------------------|--|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard<br>Immediate (acute) health hazard<br>Sudden release of pressure hazard |
|-------------------------------------|--|

#### diethyl ether (60-29-7)

|                                     |  |
|-------------------------------------|--|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard |
|-------------------------------------|--|

#### Toluene (108-88-3)

Listed on United States SARA Section 313  
Listed on the United States TSCA (Toxic Substances Control Act) inventory

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard<br>Immediate (acute) health hazard |
|-------------------------------------|---|

#### Heptane, branched cyclic (426260-76-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Fire hazard<br>Immediate (acute) health hazard<br>Delayed (chronic) health hazard |
|-------------------------------------|---|

#### distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

|                                     |                                 |
|-------------------------------------|---------------------------------|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard |
|-------------------------------------|---------------------------------|

#### Petroleum gases, liquefied, sweetened (68476-86-8)

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard<br>Fire hazard<br>Sudden release of pressure hazard |
|-------------------------------------|---|

### 15.2. International regulations

#### CANADA

#### MASTER 25% STARTING FLUID 11 OZ.

|                      |   |
|----------------------|---|
| WHMIS Classification | Class B Division 5 - Flammable Aerosol<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|---|

#### Toluene (108-88-3)

|                      |   |
|----------------------|---|
| WHMIS Classification | Class B Division 2 - Flammable Liquid<br>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |
|----------------------|---|

#### Heptane, branched cyclic (426260-76-6)

|                      |  |
|----------------------|--|
| WHMIS Classification | Class B Division 2 - Flammable Liquid<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|--|

### EU-Regulations

#### Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.1; R45

Muta.Cat.2; R46

Repr.Cat.3; R63

F+; R12

Xn; R22

Xi; R38

R19

Full text of R-phrases: see section 16

### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

#### MASTER 25% STARTING FLUID 11 OZ.()

|   |   |
|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | Yes   |
| State or local regulations                            | U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) |

#### Toluene (108-88-3)

|   |
|---|
| U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) |
|---|

## SECTION 16: Other information

Indication of changes

: Revision - See : \*.

Training advice

: Ensure operators understand the flammability hazard. Ensure operators understand the hazard of oxygen enrichment. Receptacle under pressure.

Other information

: None.

Full text of H-phrases: see section 16:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4                                  |
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1    |
| Aquatic Chronic 1   | Hazardous to the aquatic environment - Chronic Hazard Category 1  |
| Aquatic Chronic 3   | Hazardous to the aquatic environment - Chronic Hazard Category 3  |
| Asp. Tox. 1         | Aspiration hazard Category 1                                      |
| Carc. 1A            | Carcinogenicity Category 1A                                       |
| Compressed gas      | Gases under pressure Compressed gas                               |
| Flam. Aerosol 1     | Flammable aerosol Category 1                                      |
| Flam. Gas 1         | Flammable gases Category 1  |
| Flam. Liq. 1        | Flammable liquids Category 1                                      |
| Flam. Liq. 2        | Flammable liquids Category 2                                      |
| Muta. 1B            | Germ cell mutagenicity Category 1B                                |
| Repr. 2             | Reproductive toxicity Category 2                                  |
| Skin Irrit. 2       | Skin corrosion/irritation Category 2                              |
| STOT RE 2           | Specific target organ toxicity (repeated exposure) Category 2     |
| STOT SE 3           | Specific target organ toxicity (single exposure) Category 3       |
| H220                | Extremely flammable gas   |
| H222                | Extremely flammable aerosol                                       |
| H224                | Extremely flammable liquid and vapor                              |
| H225                | Highly flammable liquid and vapor                                 |
| H280                | Contains gas under pressure; may explode if heated                |
| H302                | Harmful if swallowed  |
| H304                | May be fatal if swallowed and enters airways                      |
| H315                | Causes skin irritation  |
| H336                | May cause drowsiness or dizziness                                 |
| H340                | May cause genetic defects   |
| H350                | May cause cancer  |
| H361                | Suspected of damaging fertility or the unborn child               |
| H373                | May cause damage to organs through prolonged or repeated exposure |
| H400                | Very toxic to aquatic life  |
| H410                | Very toxic to aquatic life with long lasting effects              |

# MASTER 25% STARTING FLUID 11 OZ.

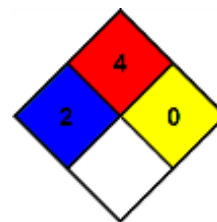
## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H412

Harmful to aquatic life with long lasting effects

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 4 Severe Hazard
- Physical : 1 Slight Hazard
- Personal Protection : B

SDS US (GHS HazCom 2012)

*The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product*

*Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.*

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 1 of 10

## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

**Product Name:** MOBILGREASE 28  
**Product Description:** Synthetic Base Stocks and Additives  
**Product Code:** 201550402020, 530626-85  
**Intended Use:** Grease

#### COMPANY IDENTIFICATION

**Supplier:** Aviall Australia Pty. Limited  
20-22 Lindaway Place  
Tullamarine  
Victoria 3043 Australia

|                                      |                               |              |
|--------------------------------------|-------------------------------|--------------|
| <b>Product Technical Information</b> | (8:00am to 4:30pm Mon to Fri) | 1300 919 904 |
| <b>Supplier General Contact</b>      | (03) 9339 3000                |              |

### SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Contains:** N-PHENYL-1-NAPHTHYLAMINE May produce an allergic reaction.

#### Other hazard information:

**Physical / Chemical Hazards:**  
No significant hazards.

**Health Hazards:**  
High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation. Secondary amines or materials containing secondary amines should not be added to this product due to the risk of forming nitrosamines, some of which have been shown to be carcinogenic in lab animals.

**Environmental Hazards:**  
Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 2 of 10

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

#### Hazardous Substance(s) or Complex Substance(s) required for disclosure

| Name                       | CAS#       | Concentration* | GHS Hazard Codes                                     |
|----------------------------|------------|----------------|--|
| N-PHENYL-1-NAPHTHYLAMINE   | 90-30-2    | 0.1 - < 1%     | H302, H317, H373, H400(M factor 1), H410(M factor 1) |
| N-OLEYLSARCOSINE           | 110-25-8   | 0.1 - < 1%     | H315, H318, H332, H400(M factor 1), H412             |
| PENTAERYTHRITOL            | 115-77-5   | 1 - < 5%       | None   |
| SODIUM NITRITE             | 7632-00-0  | 0.1 - < 1%     | H272(2)(S), H301, H319(2A), H400(M factor 1)         |
| SODIUM PHOSPHATE, TRIBASIC | 10101-89-0 | 0.1 - < 1%     | H315, H319(2A), H335                                 |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Other ingredients determined not to be hazardous up to 100%.

### SECTION 4 FIRST AID MEASURES

#### INHALATION

Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

#### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

#### NOTE TO PHYSICIAN

None

### SECTION 5 FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight streams of water

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 3 of 10

## FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulphur oxides

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** >204°C (400°F) [EST. FOR OIL, ASTM D-92 (COC)]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

### SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do so without risk. Scrape up spilled material with shovels into a suitable container for recycle or disposal.

**Water Spill:** Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

### ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

Prevent small spills and leakage to avoid slip hazard. Contains Sodium nitrite. Do not add amines which may form cancer causing nitrosamines.

**Static Accumulator:** This material is not a static accumulator.

### STORAGE

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 4 of 10

Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

| Substance Name             | Form            | Limit/Standard |                      |  | Note | Source        |
|----------------------------|-----------------|----------------|----------------------|--|------|---------------|
| PENTAERYTHRITOL            | Inhalable dust. | TWA            | 10 mg/m <sup>3</sup> |  |      | Australia WES |
| PENTAERYTHRITOL            |                 | TWA            | 10 mg/m <sup>3</sup> |  |      | ACGIH         |
| SODIUM PHOSPHATE, TRIBASIC |                 | STEL           | 5 mg/m <sup>3</sup>  |  |      | OARS WEEL     |

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### Biological limits

No biological limits allocated.

### ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Particulate

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Nitrile, Viton

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 5 of 10

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practise good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

## GENERAL INFORMATION

**Physical State:** Solid

**Form:** Semi-fluid

**Colour:** Dark Red

**Odour:** Characteristic

**Odour Threshold:** N/D

## IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15.6 °C):** 0.945 [Calculated]

**Flammability (Solid, Gas):** N/A

**Flash Point [Method]:** >204°C (400°F) [EST. FOR OIL, ASTM D-92 (COC)]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

**Boiling Point / Range:** > 316°C (600°F) [Estimated]

**Decomposition Temperature:** N/D

**Vapour Density (Air = 1):** > 2 at 101 kPa

**Vapour Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C

**Evaporation Rate (n-butyl acetate = 1):** N/D

**pH:** N/A

**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5

**Solubility in Water:** Negligible

**Viscosity:** 29.3 cSt (29.3 mm<sup>2</sup>/sec) at 40 °C | 5.7 cSt (5.7 mm<sup>2</sup>/sec) at 100°C [Estimated]

**Oxidizing Properties:** See Hazards Identification Section.

## OTHER INFORMATION

**Freezing Point:** N/D

**Melting Point:** N/D

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 6 of 10

NOTE: Most physical properties above are for the oil component in the material.

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**INCOMPATIBLE MATERIALS:** Strong oxidisers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

| <b>Hazard Class</b>  | <b>Conclusion / Remarks</b>  |
|--|--|
| <b>Inhalation</b>  |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| Irritation: No end point data for material.                    | Negligible hazard at ambient/normal handling temperatures.                                     |
| <b>Ingestion</b>   |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| <b>Skin</b>  |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| Skin Corrosion/Irritation: No end point data for material.     | Negligible irritation to skin at ambient temperatures. Based on assessment of the components.  |
| <b>Eye</b>   |  |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.       |
| <b>Sensitisation</b>   |  |
| Respiratory Sensitization: No end point data for material.     | Not expected to be a respiratory sensitizer.   |
| Skin Sensitization: No end point data for material.            | Not expected to be a skin sensitizer. Based on assessment of the components.                   |
| <b>Aspiration:</b> Data available.                             | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. |
| <b>Germ Cell Mutagenicity:</b> No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components.                 |
| <b>Carcinogenicity:</b> No end point data for material.        | Not expected to cause cancer. Based on assessment of the components.                           |
| <b>Reproductive Toxicity:</b> No end point data for material.  | Not expected to be a reproductive toxicant. Based on assessment of the components.             |
| <b>Lactation:</b> No end point data for material.              | Not expected to cause harm to breast-fed children.   |
| <b>Specific Target Organ Toxicity (STOT)</b>                   |  |
| Single Exposure: No end point data for material.               | Not expected to cause organ damage from a single exposure.                                     |

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 7 of 10

|  |  |
|--|--|
| Repeated Exposure: No end point data for material. | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components. |
|--|--|

## TOXICITY FOR SUBSTANCES

| NAME                     | ACUTE TOXICITY                         |
|--------------------------|--|
| N-PHENYL-1-NAPHTHYLAMINE | Oral Lethality: LD 50 1625 mg/kg (Rat) |

## OTHER INFORMATION

### For the product itself:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

### Contains:

Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitising in test animals and humans. N-phenyl-1-naphthylamine (PAN): A single oral overexposure may result in clinical signs/symptoms of cyanosis, headache, shallow respiration, dizziness, confusion, low blood pressure, convulsions, coma, or jaundice. Hematuria may occur due to bladder and kidney irritation, and anemia may develop later. Repeated exposure in laboratory animals caused liver and kidney damage and depressed bone marrow activity. Undiluted PAN is a skin sensitizer. Human testing of lubricants containing 1.0% PAN resulted in no reactions indicative of sensitization. Phenyl-alpha-naphthylamine (PAN): Undiluted PAN is a skin sensitizer. Human testing with lubricants containing 1.0% PAN caused no reactions indicative of sensitization. SODIUM NITRITE: Ingestion of sodium nitrite may reduce the oxygen-carrying capacity of blood and may cause cyanosis (bluish skin), shortness of breath, palpitations, coma, and/or death.

### IARC Classification:

The following ingredients are cited on the lists below:

--REGULATORY LISTS SEARCHED--

1 = IARC 1

2 = IARC 2A

3 = IARC 2B

## SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### ECOTOXICITY

Material -- Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 8 of 10

laws and regulations, and material characteristics at time of disposal.

#### DISPOSAL RECOMMENDATIONS

Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

| SECTION 14 | TRANSPORT INFORMATION |
|------------|-----------------------|
|------------|-----------------------|

**LAND (ADG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

| SECTION 15 | REGULATORY INFORMATION |
|------------|------------------------|
|------------|------------------------|

This material is not considered hazardous according to Australia Model Work Health and Safety Regulations.

Product is not regulated according to Australian Dangerous Goods Code.

No Poison Schedule number allocated by the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act.

#### REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Listed or exempt from listing/notification on the following chemical inventories (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA): AIIC, DSL, ENCS, IECSC, ISHL, TCSI, TSCA

**Special Cases:**

| Inventory | Status             |
|-----------|--------------------|
| KECI      | Restrictions Apply |

| SECTION 16 | OTHER INFORMATION |
|------------|-------------------|
|------------|-------------------|

#### KEY TO ABBREVIATIONS AND ACRONYMS:

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 9 of 10

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N/D = Not determined, N/A = Not applicable, STEL = Short-Term Exposure Limit, TWA = Time-Weighted Average

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H272(2): May intensify fire; oxidizer; Oxidizing Solid, Cat 2

H301: Toxic if swallowed; Acute Tox Oral, Cat 3

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitisation, Cat 1

H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H335: May cause respiratory irritation; Target Organ Single, Resp Irr

H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

Composition: Component Table information was modified.

Perkal Pty Ltd Trading as Statewide Oil (South Australia): Section 01: Supplier Mailing Address information was deleted.

Perkal Pty Ltd Trading as Statewide Oil (Western Australia): Section 01: Supplier Mailing Address information was deleted.

Section 01: Company Contact Methods information was modified.

Section 01: Company Mailing Address information was deleted.

Section 01: Company Mailing Address information was modified.

Section 11: Tox List Cited Table information was deleted.

Section 16: HCode Key information was modified.

Southern Cross Lubes (Victoria and Tasmania, New South Wales and Australian Capital Territory): Section 01: Supplier Mailing Address information was deleted.

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DGN: 2006172DAU (553106)

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Prepared by: Exxon Mobil Corporation

EMBSI, Clinton NJ USA

Contact Point: See Section 1 for Local Contact number

**End of (M)SDS**

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 10 of 10

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# SAFETY DATA SHEET

## 1. Identification

|  |   |
|--|---|
| Product identifier                                     | NAPA® Clean-R-Carb™ Carburetor Cleaner (50 State Formula) |
| Other means of identification                          |   |
| Product Code   | No. 091345 (Item# 1007990)                                |
| Recommended use  | Carburetor cleaner  |
| Recommended restrictions                               | None known.   |
| Manufacturer/Importer/Supplier/Distributor information |   |
| Manufactured or sold by:                               |   |
| Company name   | CRC Industries, Inc.                                      |
| Address  | 885 Louis Dr.<br>Warminster, PA 18974 US                  |
| Telephone  |   |
| General Information                                    | 215-674-4300  |
| Technical Assistance                                   | 800-521-3168  |
| Customer Service                                       | 800-272-4620  |
| 24-Hour Emergency                                      | 800-424-9300 (US)   |
| (CHEMTREC)   | 703-527-3887 (International)                              |
| Website  | www.crcindustries.com                                     |

## 2. Hazard(s) identification

|                       |  |                             |
|-----------------------|--|-----------------------------|
| Physical hazards      | Flammable aerosols                                     | Category 1                  |
|                       | Gases under pressure                                   | Compressed gas              |
| Health hazards        | Skin corrosion/irritation                              | Category 2                  |
|                       | Serious eye damage/eye irritation                      | Category 2A                 |
|                       | Specific target organ toxicity, single exposure        | Category 3 narcotic effects |
|                       | Aspiration hazard                                      | Category 1                  |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard     | Category 2                  |
|                       | Hazardous to the aquatic environment, long-term hazard | Category 2                  |
| OSHA defined hazards  | Not classified.  |                             |
| Label elements        |  |                             |



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

Precautionary statement  
Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves. Avoid release to the environment.

|  |  |
|--|--|
| <b>Response</b>                                  | If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage. |
| <b>Storage</b>                                   | Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national regulations.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.  |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name       | Common name and synonyms | CAS number | %       |
|---------------------|--------------------------|------------|---------|
| acetone             |                          | 67-64-1    | 80 - 90 |
| carbon dioxide      |                          | 124-38-9   | 5 - 10  |
| n-heptane           |                          | 142-82-5   | 3 - 5   |
| 3-methylhexane      |                          | 589-34-4   | 1 - 3   |
| 2-methylhexane      |                          | 591-76-4   | < 1     |
| 3-ethylpentane      |                          | 617-78-7   | < 0.3   |
| 3,3-dimethylpentane |                          | 562-49-2   | < 0.2   |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| <b>Fire-fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.  |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

### Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                    | Type | Value                  |
|-------------------------------|------|------------------------|
| acetone (CAS 67-64-1)         | PEL  | 2400 mg/m3<br>1000 ppm |
| carbon dioxide (CAS 124-38-9) | PEL  | 9000 mg/m3<br>5000 ppm |
| n-heptane (CAS 142-82-5)      | PEL  | 2000 mg/m3<br>500 ppm  |

#### US. ACGIH Threshold Limit Values

| Components                         | Type | Value   |
|------------------------------------|------|---------|
| 2-methylhexane (CAS 591-76-4)      | STEL | 500 ppm |
| 3,3-dimethylpentane (CAS 562-49-2) | TWA  | 400 ppm |
|                                    | STEL | 500 ppm |
| 3-ethylpentane (CAS 617-78-7)      | TWA  | 400 ppm |
|                                    | STEL | 500 ppm |

**US. ACGIH Threshold Limit Values**

| Components                    | Type | Value     |
|-------------------------------|------|-----------|
| 3-methylhexane (CAS 589-34-4) | TWA  | 400 ppm   |
|                               | STEL | 500 ppm   |
| acetone (CAS 67-64-1)         | TWA  | 400 ppm   |
|                               | STEL | 500 ppm   |
| carbon dioxide (CAS 124-38-9) | TWA  | 250 ppm   |
|                               | STEL | 30000 ppm |
| n-heptane (CAS 142-82-5)      | TWA  | 5000 ppm  |
|                               | STEL | 500 ppm   |
|                               | TWA  | 400 ppm   |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                    | Type    | Value       |
|-------------------------------|---------|-------------|
| acetone (CAS 67-64-1)         | TWA     | 590 mg/m3   |
|                               |         | 250 ppm     |
| carbon dioxide (CAS 124-38-9) | STEL    | 54000 mg/m3 |
|                               |         | 30000 ppm   |
| n-heptane (CAS 142-82-5)      | TWA     | 9000 mg/m3  |
|                               |         | 5000 ppm    |
|                               |         | 1800 mg/m3  |
|                               | Ceiling | 440 ppm     |
|                               |         | 350 mg/m3   |
|                               | TWA     | 85 ppm      |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components            | Value   | Determinant | Specimen | Sampling Time |
|-----------------------|---------|-------------|----------|---------------|
| acetone (CAS 67-64-1) | 25 mg/l | Acetone     | Urine    | *             |

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear protective gloves such as: Nitrile. Polyvinyl alcohol (PVA). Viton/butyl.

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Aerosol.

**Color**

Colorless.

**Odor**

Solvent.

**Odor threshold**

Not available.

|   |                                    |
|---|------------------------------------|
| <b>pH</b>   | Not available.                     |
| <b>Melting point/freezing point</b>                 | -138.5 °F (-94.7 °C) estimated     |
| <b>Initial boiling point and boiling range</b>      | 132.9 °F (56.1 °C) estimated       |
| <b>Flash point</b>                                  | < 0 °F (< -17.8 °C) Tag Closed Cup |
| <b>Evaporation rate</b>                             | Fast.                              |
| <b>Flammability (solid, gas)</b>                    | Not available.                     |
| <b>Upper/lower flammability or explosive limits</b> |                                    |
| <b>Flammability limit - lower (%)</b>               | 1.1 % estimated                    |
| <b>Flammability limit - upper (%)</b>               | 12.8 % estimated                   |
| <b>Vapor pressure</b>                               | 5061 hPa estimated                 |
| <b>Vapor density</b>                                | > 2 (air = 1)                      |
| <b>Relative density</b>                             | 0.84 estimated                     |
| <b>Solubility (water)</b>                           | Slightly soluble.                  |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                     |
| <b>Auto-ignition temperature</b>                    | 539.6 °F (282 °C) estimated        |
| <b>Decomposition temperature</b>                    | Not available.                     |
| <b>Viscosity (kinematic)</b>                        | Not available.                     |
| <b>Percent volatile</b>                             | 91.4 % estimated                   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.                   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.   |
| <b>Conditions to avoid</b>                | Heat, flames and sparks. Contact with incompatible materials.   |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Strong acids. Strong bases. Aldehydes. Alkalies. Amines. Ammonia. Halogens. Peroxides. |
| <b>Hazardous decomposition products</b>   | Carbon oxides.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.                   |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |

|   |  |
|---|--|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|--|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. |
|-----------------------|---|

| Components                    | Species | Test Results |
|-------------------------------|---------|--------------|
| 3-methylhexane (CAS 589-34-4) |         |              |
| <b><u>Acute</u></b>           |         |              |
| <b>Dermal</b>                 |         |              |
| LD50                          | Rabbit  | > 2000 mg/kg |

| Components               | Species | Test Results |
|--------------------------|---------|--------------|
| <b>Oral</b>              |         |              |
| LD50                     | Rat     | > 2000 mg/kg |
| acetone (CAS 67-64-1)    |         |              |
| <b>Acute</b>             |         |              |
| <b>Dermal</b>            |         |              |
| LD50                     | Rabbit  | 20000 mg/kg  |
| <b>Oral</b>              |         |              |
| LD50                     | Rat     | 5800 mg/kg   |
| n-heptane (CAS 142-82-5) |         |              |
| <b>Acute</b>             |         |              |
| <b>Dermal</b>            |         |              |
| LD50                     | Rabbit  | 3000 mg/kg   |

\* Estimates for product may be based on additional component data not shown.

|   |   |
|---|---|
| <b>Skin corrosion/irritation</b>                                      | Causes skin irritation.   |
| <b>Serious eye damage/eye irritation</b>                              | Causes serious eye irritation.  |
| <b>Respiratory sensitization</b>                                      | Not a respiratory sensitizer.   |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.   |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  |
| <b>Carcinogenicity</b>  | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.   |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |   |
| Not listed.   |   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |   |
| Not regulated.  |   |
| <b>US. National Toxicology Program (NTP) Report on Carcinogens</b>    |   |
| Not listed.   |   |
| <b>Reproductive toxicity</b>  | This product is not expected to cause reproductive or developmental effects.  |
| <b>Specific target organ toxicity - single exposure</b>               | May cause drowsiness and dizziness.   |
| <b>Specific target organ toxicity - repeated exposure</b>             | Not classified.   |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death. |
| <b>Chronic effects</b>  | Prolonged inhalation may be harmful.  |

## 12. Ecological information

| <b>Ecotoxicity</b>       | Toxic to aquatic life with long lasting effects. |   |                              |
|--------------------------|--|---|------------------------------|
| Components               | Species  |   | Test Results                 |
| acetone (CAS 67-64-1)    |  |   |                              |
| <b>Aquatic</b>           |  |   |                              |
| Crustacea                | EC50   | Water flea (Daphnia magna)                          | 10294 - 17704 mg/l, 48 hours |
| Fish                     | LC50   | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours   |
| n-heptane (CAS 142-82-5) |  |   |                              |
| <b>Aquatic</b>           |  |   |                              |
| <b>Acute</b>             |  |   |                              |
| Crustacea                | EC50   | Water flea (Daphnia magna)                          | 1.5 mg/l, 48 hours           |
| Fish                     | LC50   | Fathead minnow (Pimephales promelas)                | 2.1 - 2.98 mg/l, 96 hours    |

\* Estimates for product may be based on additional component data not shown.

|                                      |  |
|--------------------------------------|--|
| <b>Persistence and degradability</b> | No data is available on the degradability of this product. |
|--------------------------------------|--|

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

|           |       |
|-----------|-------|
| acetone   | -0.24 |
| n-heptane | 4.66  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

---

## 13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal of waste from residues / unused products</b> | This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations. |
| <b>Hazardous waste code</b>                              | D001: Waste Flammable material with a flash point <140 F<br>F003: Waste Non-halogenated Solvent - Spent Non-halogenated Solvent   |
| <b>Contaminated packaging</b>                            | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.  |

---

## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82   |
| <b>Packaging exceptions</b>         | 306   |
| <b>Packaging non bulk</b>           | 304   |
| <b>Packaging bulk</b>               | None  |

### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |

|                                     |                            |
|-------------------------------------|----------------------------|
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions. |
| <b>Cargo aircraft only</b>          | Allowed with restrictions. |

### IMDG

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | AEROSOLS, Limited Quantity  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        |   |
| <b>Marine pollutant</b>             | No.   |
| <b>EmS</b>                          | F-D, S-U  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

3,3-dimethylpentane (CAS 562-49-2) Listed.

acetone (CAS 67-64-1) Listed.

#### CERCLA Hazardous Substances: Reportable quantity

3,3-dimethylpentane (CAS 562-49-2) 100 LBS

acetone (CAS 67-64-1) 5000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

acetone (CAS 67-64-1) 6532

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

acetone (CAS 67-64-1) 35 %WV

#### DEA Exempt Chemical Mixtures Code Number

acetone (CAS 67-64-1) 6532

#### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

acetone (CAS 67-64-1) Low priority

#### Food and Drug Administration (FDA)

Not regulated.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - Yes

Hazard categories Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

### US state regulations

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

acetone (CAS 67-64-1)

#### US. New Jersey Worker and Community Right-to-Know Act

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Massachusetts RTK - Substance List

2-methylhexane (CAS 591-76-4)

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Pennsylvania Worker and Community Right-to-Know Law

3,3-dimethylpentane (CAS 562-49-2)

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Rhode Island RTK

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

##### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

acetaldehyde (CAS 75-07-0)

Listed: April 1, 1988

benzene (CAS 71-43-2)

Listed: February 27, 1987

cumene (CAS 98-82-8)

Listed: April 6, 2010

ethylbenzene (CAS 100-41-4)

Listed: June 11, 2004

naphthalene (CAS 91-20-3)

Listed: April 19, 2002

##### US - California Proposition 65 - CRT: Listed date/Developmental toxin

benzene (CAS 71-43-2)

Listed: December 26, 1997

toluene (CAS 108-88-3)

Listed: January 1, 1991

##### US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

benzene (CAS 71-43-2)

Listed: December 26, 1997

#### Volatile organic compounds (VOC) regulations

##### EPA

**VOC content (40 CFR 51.100(s))** 9.2 %

**Consumer products (40 CFR 59, Subpt. C)** Compliant

##### State

**Consumer products** This product is regulated as a Carburetor Cleaner. This product is compliant for use in all 50 states.

**VOC content (CA)** 9.2 %

**VOC content (OTC)** 9.2 %

#### International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | Yes                    |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 02-28-2014

**Revision date** 10-04-2017  
**Prepared by** Allison Yoon  
**Version #** 04  
**Further information** CRC # 920B/1002914  
**HMIS® ratings** Health: 2  
Flammability: 4  
Physical hazard: 0  
Personal protection: B  
**NFPA ratings** Health: 2  
Flammability: 4  
Instability: 0

**NFPA ratings**



**Disclaimer**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

**Revision Information**

Product and Company Identification: Product Codes  
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection  
Other information, including date of preparation or last revision: Further information



# SAFETY DATA SHEET

Revision Date 11-May-2020

Version 3

## 1. IDENTIFICATION

### Product identifier

**Product Name** GASKET REMOVER 4 OZ.

### Other means of identification

**Product Code** 80645

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesive Remover

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                      |                |
|----------------------|----------------|
| Gases under pressure | Compressed gas |
|----------------------|----------------|

### Label elements

#### **Emergency Overview**

Contains gas under pressure; may explode if heated



This product contains substances which at their given concentration, are considered to be hazardous to health

|                         |                                      |                   |
|-------------------------|--------------------------------------|-------------------|
| <b>Appearance</b> White | <b>Physical state</b> Viscous liquid | <b>Odor</b> Ester |
|-------------------------|--------------------------------------|-------------------|

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 4. FIRST AID MEASURES

**Description of first aid measures**

|   |   |
|---|---|
| <b>General advice</b>                     | Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.  |
| <b>Eye contact</b>                        | IF IN EYES: Wash with plenty of water.  |
| <b>Skin contact</b>                       | In case of contact with liquefied gas, thaw frosted parts with lukewarm water.  |
| <b>Inhalation</b>                         | Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult. |
| <b>Ingestion</b>                          | IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.                                  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.                                 |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Keep victim warm and quiet.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing agent suitable for type of surrounding fire, Dry chemical or CO<sub>2</sub>, Water spray, fog or regular foam, Move containers from fire area if you can do it without risk, Damaged cylinders should be handled only by specialists

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

Some may burn but none ignite readily. Ruptured cylinders may rocket.

**Explosion data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Do not touch or walk through spilled material. Stop leak if you can do it without risk.

**Other Information** Ventilate the area.

**Environmental precautions**

**Environmental precautions** Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.

**Methods for cleaning up** Do not direct water at spill or source of leak.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Contents under pressure. Do not puncture or incinerate cans.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Protect from sunlight. Store in a well-ventilated place.

**Incompatible materials** Strong oxidizing agents, Acids, Alkalis

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines****Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection**

None under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Viscous liquid           |
| <b>Appearance</b>     | White                    |
| <b>Odor</b>           | Ester                    |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                    | <u>Values</u>            | <u>Remarks • Method</u>          |
|--|--------------------------|----------------------------------|
| pH   | 5.9-7.1                  |                                  |
| Melting point / freezing point                     | No information available |                                  |
| Boiling point / boiling range                      | No information available |                                  |
| Flash point  | > 95 °C / > 203 °F       | Pensky-Martens Closed Cup (PMCC) |
| Evaporation rate                                   | <1                       | Butyl acetate = 1                |
| Flammability (solid, gas)                          | No information available |                                  |
| Flammability Limit in Air                          |                          |                                  |
| Upper flammability limit:                          | No information available |                                  |
| Lower flammability limit:                          | No information available |                                  |
| Vapor pressure                                     | No information available |                                  |
| Vapor density                                      | >1                       | Air = 1                          |
| Relative density                                   | 1.07                     |                                  |
| Water solubility                                   | Soluble in water         |                                  |
| Solubility(ies)                                    | No information available |                                  |
| Partition coefficient                              | No information available |                                  |
| Autoignition temperature                           | No information available |                                  |
| Decomposition temperature                          | No information available |                                  |
| Kinematic viscosity                                | No information available |                                  |
| Dynamic viscosity                                  | No information available |                                  |
| Explosive properties                               | No information available |                                  |
| Oxidizing properties                               | No information available |                                  |
| <b>Other Information</b>                           |                          |                                  |
| Softening point                                    | No information available |                                  |
| Molecular weight                                   | No information available |                                  |
| VOC Content (%)                                    | 28.55                    |                                  |
| Density  | No information available |                                  |
| Bulk density                                       | No information available |                                  |
| SADT (self-accelerating decomposition temperature) | No information available |                                  |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available

**Chemical stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents, Acids, Alkalis

**Hazardous Decomposition Products**

Carbon oxides

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.   |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes. |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis.                                       |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.                                |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|  |  |
|--|--|
| <b>Sensitization</b>                               | No information available.  |
| <b>Germ cell mutagenicity</b>                      | No information available.  |
| <b>Carcinogenicity</b>                             | The table below indicates whether each agency has listed any ingredient as a carcinogen. |
| IARC (International Agency for Research on Cancer) |  |
| <i>Not classifiable as a human carcinogen</i>      |  |

The following values are calculated based on chapter 3.1 of the GHS document .

|                        |             |
|------------------------|-------------|
| <b>ATEmix (oral)</b>   | 15889 mg/kg |
| <b>ATEmix (dermal)</b> | 18537 mg/kg |

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0.01 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b> | Do not reuse container.   |

US EPA Waste Number Not applicable

#### 14. TRANSPORT INFORMATION

##### DOT

UN/ID No 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.2  
 Special Provisions 126

##### IATA

UN/ID No ID 8000  
 Proper shipping name: Consumer commodity  
 Hazard Class 9  
 ERG Code 9L

##### IMDG

UN/ID No 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.2  
 EmS-No F-D, S-U

#### 15. REGULATORY INFORMATION

##### International Inventories

|               |                |
|---------------|----------------|
| TSCA          | Complies       |
| DSL/NDSL      | Complies       |
| EINECS/ELINCS | Complies       |
| ENCS          | Not determined |
| IECSC         | Complies       |
| KECL          | Not determined |
| PICCS         | Complies       |
| AICS          | Not determined |

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

##### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| NITROGEN<br>7727-37-9        | X          | X             | X            |
| 2-PHENOXYETHANOL<br>122-99-6 | X          | -             | X            |
| TRIETHANOLAMINE<br>102-71-6  | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)


HMIS (Hazardous Material Information System)

**Revision Date** 11-May-2020

**Disclaimer**

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**End of Safety Data Sheet**

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 1                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® EP WHEEL BEARING GREASE

### Recommended use of the chemical and restrictions on use

|   |  |
|---|--|
| <b>Details of the supplier of the safety data sheet</b><br><br>Valvoline LLC<br>3499 Blazer Parkway<br>Lexington, KY 40509<br>United States of America<br><br>SDS@valvoline.com | <b>Emergency telephone number</b><br>1-800-VALVOLINE<br><br><b>Regulatory Information Number</b><br>1-800-TEAMVAL<br><br><b>Product Information</b><br>1-800-TEAMVAL |
|---|--|

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.


## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components


| Chemical Name   | CAS-No.    | Classification    | Concentration (%) |
|---|------------|-------------------|-------------------|
| DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC | 64742-65-0 | Asp. Tox. 1; H304 | 74.99             |

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 2                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

|  |            |                                       |       |
|--|------------|---------------------------------------|-------|
| ASPHALT  | 8052-42-4  | Not a hazardous substance or mixture. | 24.99 |
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>NAPHTA | 64742-52-5 | Not a hazardous substance or mixture. | 9.99  |

#### SECTION 4. FIRST AID MEASURES

|   |   |
|---|---|
| General advice  | : No hazards which require special first aid measures.  |
| If inhaled  | : If breathed in, move person into fresh air.<br>If unconscious place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.   |
| In case of skin contact                                     | : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.  |
| In case of eye contact                                      | : Remove contact lenses.<br>Protect unharmed eye.   |
| If swallowed  | : Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.  |
| Most important symptoms and effects, both acute and delayed | : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.<br><br>Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:<br>stomach or intestinal upset (nausea, vomiting, diarrhea)<br>irritation (nose, throat, airways) |
| Notes to physician  | : No hazards which require special first aid measures.  |

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 3                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

## SECTION 5. FIREFIGHTING MEASURES


- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
sulfur oxides  
Hydrocarbons  
Aldehydes  
Ketones  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 4                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

application area.  
For personal protection see section 8.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.


Materials to avoid : No materials to be especially mentioned.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components  | CAS-No.    | Value type<br>(Form of exposure) | Control parameters /<br>Permissible concentration         | Basis       |
|---|------------|----------------------------------|---|-------------|
| DISTILLATES (PETROLEUM),<br>SOLVENT-DEWAXED HEAVY<br>PARAFFINIC | 64742-65-0 | PEL                              | 500 ppm<br>2,000 mg/m3                                    | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |
|   |            | PEL                              | 5 mg/m3<br>Mist.  | OSHA_TRANS  |
|   |            | TWA                              | 5 mg/m3<br>Mist.  | Z1A         |
|   |            | TWA                              | 400 ppm<br>1,600 mg/m3                                    | Z1A         |
| ASPHALT   | 8052-42-4  | TWA                              | 0.5 mg/m3<br>Inhalable fraction.<br>(as benzene solubles) | ACGIH       |
|   |            | Ceil_Time                        | 5 mg/m3<br>Fume.  | NIOSH/GUIDE |
|   |            | PEL                              | 500 ppm<br>2,000 mg/m3                                    | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>NAPHTA        | 64742-52-5 | PEL                              | 5 mg/m3<br>Mist.  | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known,

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 5                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

suspected or apparent adverse effects.


#### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.
- Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : General industrial hygiene practice.

---

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : gel
- Physical state : liquid
- Colour : red
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available  
: 640 °F / 338 °C
- Flash point : 471 °F / 244 °C
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : < 0.01 mmHg (20 °C)
- Relative vapour density : No data available

|  |  |                           |
|--|--|---------------------------|
|  |  | Page: 6                   |
| <b>SAFETY DATA SHEET</b>   |  | Revision Date: 07/31/2016 |
|  |  | Print Date: 9/27/2016     |
|  |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600   |  | Version: 1.1              |

Relative density : 0.95 (15.6 °C)

Density : 0.90 g/cm<sup>3</sup> (20 °C)

Solubility(ies)  
  Water solubility : negligible  
  Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : > 315 °C

Thermal decomposition : No data available

Viscosity  
  Viscosity, dynamic : No data available  
  Viscosity, kinematic : > 20.5 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.


Incompatible materials : Strong oxidizing agents

Hazardous decomposition products  
  carbon dioxide and carbon monoxide  
  Hydrocarbons  
  Sulphur oxides

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
  Skin contact  
  Eye Contact

|   |                           |
|---|---------------------------|
|  | Page: 7                   |
| <b>SAFETY DATA SHEET</b>  | Revision Date: 07/31/2016 |
|   | Print Date: 9/27/2016     |
|   | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  | Version: 1.1              |

### Ingestion

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate (Rat): 3,019 mg/kg

Acute dermal toxicity : Acute toxicity estimate (Rabbit): 169,492 mg/kg

#### Components:

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Acute oral toxicity : LD 50 (Rat): > 5 g/kg

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: Not classified as acutely toxic by inhalation under GHS.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Remarks: No mortality observed at this dose.

#### Skin corrosion/irritation

Not classified based on available information.

#### Product:

Result: Not irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

#### Components:

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to skin

ASPHALT:

Result: Not irritating to skin

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:


Species: Rabbit

Result: Not irritating to skin

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Product:

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 8                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

Result: Not irritating to eyes

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to eyes

**ASPHALT:**

Result: Possibly irritating to eyes

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Rabbit

Result: Mildly irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available


**Carcinogenicity:**

**IARC**

Group 2B: Possibly carcinogenic to humans

ASPHALT

8052-42-4

|  |  |                           |
|--|--|---------------------------|
|  |  | Page: 9                   |
| <b>SAFETY DATA SHEET</b>   |  | Revision Date: 07/31/2016 |
|  |  | Print Date: 9/27/2016     |
|  |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600   |  | Version: 1.1              |

#### OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
End point: Growth inhibition  
Exposure time: 72 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l  
Exposure time: 21 d  
Test Type: semi-static test  
Test substance: WAF  
Method: OECD Test Guideline 211


### Persistence and degradability

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Biodegradability : Result: Inherently biodegradable  
Biodegradation: 31 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

### Bioaccumulative potential

No data available

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 10                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE   |  | Version: 1.1              |
| NP75600   |  |                           |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

---

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|           |                      |               |                    |               |                              |

**U.S. DOT - ROAD**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**CFR\_RAIL\_C**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**U.S. DOT - INLAND WATERWAYS**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_ROAD\_C**


|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_RAIL\_C**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_INWT\_C**

|                     |
|---------------------|
| Not dangerous goods |
|---------------------|

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 11                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE   |  | Version: 1.1              |
| NP75600   |  |                           |

**INTERNATIONAL MARITIME DANGEROUS GOODS**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**MX\_DG**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

|                  |    |
|------------------|----|
| Marine pollutant | no |
|------------------|----|

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.  
**Component(s)SARA 313**

**California Prop 65** Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**


TSCA : On TSCA Inventory

AUSTR : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL.

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

|   |                           |
|---|---------------------------|
|  | Page: 12                  |
| <b>SAFETY DATA SHEET</b>  | Revision Date: 07/31/2016 |
|   | Print Date: 9/27/2016     |
|   | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  | Version: 1.1              |

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

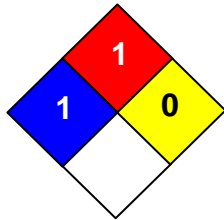
#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

## SECTION 16. OTHER INFORMATION

#### Further information

Revision Date: 07/31/2016

| NFPA:  | HMIS III:   |               |          |                     |          |                        |          |
|--|---|---------------|----------|---------------------|----------|------------------------|----------|
| <p style="text-align: center;">Flammability</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); margin-right: 10px;">Health</div>  <div style="writing-mode: vertical-rl; margin-left: 10px;">Instability</div> </div> <p style="text-align: center;">Special hazard.</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: blue; color: white; text-align: center;"><b>HEALTH</b></td><td style="text-align: center;"><b>1</b></td></tr> <tr> <td style="background-color: red; color: white; text-align: center;"><b>FLAMMABILITY</b></td><td style="text-align: center;"><b>1</b></td></tr> <tr> <td style="background-color: yellow; text-align: center;"><b>PHYSICAL HAZARD</b></td><td style="text-align: center;"><b>0</b></td></tr> </table> <p>0 = not significant, 1 = Slight,<br/>2 = Moderate, 3 = High<br/>4 = Extreme, * = Chronic</p> | <b>HEALTH</b> | <b>1</b> | <b>FLAMMABILITY</b> | <b>1</b> | <b>PHYSICAL HAZARD</b> | <b>0</b> |
| <b>HEALTH</b>  | <b>1</b>  |               |          |                     |          |                        |          |
| <b>FLAMMABILITY</b>  | <b>1</b>  |               |          |                     |          |                        |          |
| <b>PHYSICAL HAZARD</b>   | <b>0</b>  |               |          |                     |          |                        |          |

#### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

#### Full text of H-Statements referred to under sections 2 and 3.


H304 May be fatal if swallowed and enters airways.

Sources of key data used to compile the Safety Data Sheet

Valvoline internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-825-8654).

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 13                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
 BEI : Biological Exposure Index  
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
 FG : Food grade  
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
 H-statement : Hazard Statement  
 IATA : International Air Transport Association.  
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
 IMDG : International Maritime Code for Dangerous Goods  
 ISO : International Organization for Standardization  
 logPow : octanol-water partition coefficient  
 LCxx : Lethal Concentration, for xx percent of test population  
 LDxx : Lethal Dose, for xx percent of test population.  
 ICxx : Inhibitory Concentration for xx of a substance  
 Ecxx : Effective Concentration of xx  
 N.O.S.: Not Otherwise Specified  
 OECD : Organization for Economic Co-operation and Development  
 OEL : Occupational Exposure Limit  
 P-Statement : Precautionary Statement  
 PBT : Persistent , Bioaccumulative and Toxic  
 PPE : Personal Protective Equipment  
 STEL : Short-term exposure limit  
 STOT : Specific Target Organ Toxicity  
 TLV : Threshold Limit Value  
 TWA : Time-weighted average  
 vPvB : Very Persistent and Very Bioaccumulative  
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT : Department of Transportation  
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
 HMIRC : Hazardous Materials Information Review Commission  
 HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System

# SAFETY DATA SHEET

Prepared to U.S. OSHA, Canadian WHMIS Standards, and the Global Harmonization Standard

DATE OF PREPARATION: September 8, 2000  
DATE OF REVISION: October 21, 2020

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

### IDENTIFICATION of the SUBSTANCE or PREPARATION:

TRADE NAME:

**NOVUS PLASTIC POLISH #1** (Plastic Clean & Shine, NOVUS No 1)

PRODUCT CODES:

7012, 7020, 7023, 7024, 7026, 7050, 7052, 7299, 7302

### RELEVANT USES of the SUBSTANCE:

Clean and Restore Plastic Surfaces

### USES ADVISED AGAINST:

Other than Relevant Use, Including Glass Polishing

### COMPANY/UNDERTAKING IDENTIFICATION:

U.S. DISTRIBUTOR'S NAME:

**NOVUS 2 LLC**

ADDRESS:

650 Pelham Boulevard, Suite 100  
St Paul, MN 55114

CANADIAN DISTRIBUTOR'S NAME:

**FIX AUTO**

ADDRESS:

99 Émilien-Marcoux Suite 101  
Blainville, Québec J7C 0B4, Canada

EMERGENCY PHONE (medical):

1-800-420-8036 [24-hrs]

EMAIL ADDRESS FOR SDS INFORMATION:

[msds-info@novusglass.com](mailto:msds-info@novusglass.com)

## 2. HAZARD IDENTIFICATION

This product has been classified under OSHA's Hazard Communication Standard (29CFR §1910.1200), and Canadian WHMIS (HPR). This is a self-classification.

### GHS CLASSIFICATION:

None

### GHS LABEL ELEMENTS:

Signal Word: None

Hazard Statements: None

Precautionary Statements:

Prevention: None

Response: None

Storage: None

Disposal: None

Hazard Symbols/Pictograms: None

### 3. COMPOSITION and INFORMATION ON INGREDIENTS

SUBSTANCE or MIXTURE:

Mixture

CHEMICAL NAME/CLASS:

Organic Liquid/Polymer/Water Mixture

| CHEMICAL NAME                            | CAS #      | % w/w  | GHS Classification<br>Hazard Statements/Pictograms   |
|--|------------|--------|--|
| Isopropyl Alcohol                        | 67-63-0    | ≤ 0.5% | Classification: Flam Liq Cat. 2, Eye Irr Cat. 2A, STOT SE 3<br>Hazard Statement Codes: H225, H319, H336<br>Hazard Symbols/Pictograms: GHS02, GHS07 |
| Polydimethylsiloxane, Silanol Terminated | 70131-67-8 | < 5.0% | Classification: Not Applicable   |
| Dimethylpolysiloxane                     | 63148-62-9 | < 2.0% | Classification: Not Applicable   |

### 4. FIRST-AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES:** Contaminated individuals must be taken for medical attention if any adverse effects occur. Take a copy of label and SDS to health professional with victim.

**SKIN EXPOSURE:** If this material contaminates the skin, begin decontamination with running water. Recommended flushing is for 15 minutes if any sign of skin irritation develops. Contaminated individual should seek immediate medical attention if any adverse exposure symptoms develop.

**EYE EXPOSURE:** If this product enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 20 minutes. Contaminated individual must seek medical attention if adverse effect continues after flushing.

**INHALATION:** If this product is inhaled, remove contaminated individual to fresh air. Contaminated individual must seek medical attention if adverse effects occur.

**INGESTION:** If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If victim is convulsing, maintain an open airway and obtain immediate medical attention.

**MOST IMPORTANT SYMPTOMS/EFFECTS (ACUTE AND CHRONIC):** See Sections 2 (Hazard Identification) and 11 (Toxicological Information) for description of possible health effects from exposure to this product.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Dermatitis and other pre-existing skin disorders may be aggravated by prolonged overexposure to this product.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED:** Treat symptoms and eliminate overexposure.

### 5. FIRE-FIGHTING MEASURES

**FIRE EXTINGUISHING MEDIA:** Use extinguishing material suitable to the surrounding fire, including halon, carbon dioxide, dry chemical and ABC class.

**UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

**SPECIAL HAZARDS ARISING FROM THE SUBSTANCE:** When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., oxides of silicon and carbon).

Explosion Sensitivity to Mechanical Impact: Not applicable.

Explosion Sensitivity to Static Discharge: Not applicable.

**SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS:** Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES:** Proper protective equipment should be used. In the event of a spill, clear the area and protect people. Eliminate all sources of ignition before cleanup begins. Use non-sparking tools. The atmosphere must have levels of components lower than those listed in Section 8, (Exposure Controls and Personal Protective Equipment) if applicable, and have at least 19.5 percent oxygen before personnel can be allowed into the area without Self-Contained Breathing Apparatus (SCBA).

**PERSONAL PROTECTIVE EQUIPMENT:** Use proper protective equipment and non-sparking tools and equipment.

**Small Spills:** Wear rubber gloves, splash goggles, and appropriate body protection.

**METHODS FOR CLEAN-UP AND CONTAINMENT:** Avoid allowing contact with water on spilled substance or inside containers.

**Small Spills:** Absorb spilled material with polypads or other suitable, non-reacting sorbent, avoiding generation of aerosols, wearing gloves, goggles and apron. Place spilled material in appropriate container for disposal, sealing tightly. Remove all residue before decontamination of spill area.

**Large Spills:** Access to the spill area should be restricted. Spread should be limited by diking spill area. Absorb spilled liquid with polypads or other suitable absorbent materials.

**All Spills:** Place all spill residue in a double plastic bag or other containment and seal. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

**ENVIRONMENTAL PRECAUTIONS:** Avoid release to the environment. Run-off water may be contaminated by other materials and should be contained to prevent possible environmental damage.

**REFERENCE TO OTHER SECTIONS:** See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

## 7. HANDLING and STORAGE

### TECHNICAL MEASURES:

See Ventilation and Engineering Controls in Section 8.

### PRECAUTIONS FOR SAFE HANDLING:

All employees who handle this material should be trained to handle it safely. Keep container tightly closed when not in use. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors or mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

### CONDITIONS FOR SAFE STORAGE:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored away from incompatible materials (See Section 10.) Material should be stored in secondary containers or in a diked area, as appropriate. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Storage areas should be made of fire resistant materials. Have appropriate extinguishing equipment in the storage area (such as sprinkler systems or portable fire extinguishers). Empty containers may contain residual product; therefore, empty containers should be handled with care.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

### EXPOSURE LIMITS:

#### OCCUPATIONAL/WORKPLACE EXPOSURE LIMITS/GUIDELINES:

| CHEMICAL NAME                               | CAS #      | EXPOSURE LIMITS IN AIR   |                           |                          |                                 |                          |                           |                                  |   |
|---|------------|--------------------------|---------------------------|--------------------------|---------------------------------|--------------------------|---------------------------|----------------------------------|---|
|   |            | ACGIH-TLVS               |                           | US OSHA-PELS             |                                 | NIOSH-RELS               |                           | NIOSH                            | OTHER   |
|   |            | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup> | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup>       | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup> | IDLH<br>mg/m <sup>3</sup>        |   |
| Isopropyl Alcohol                           | 67-63-0    | 200                      | 400                       | 400                      | 500<br>(vacated<br>1989<br>PEL) | 400                      | 500                       | 2000 (based<br>on 10% of<br>LEL) | Canada (ON, AB, SK) OEL<br>TWA= 200ppm, STEL =<br>400ppm<br>Canada (QB, YK) OEL TWA/EV<br>= 400ppm, STEL/V = 500ppm |
| Dimethylpolysiloxane                        | 63148-62-9 | NE                       | NE                        | NE                       | NE                              | NE                       | NE                        | NE                               | NE  |
| Polydimethylsiloxane, Silanol<br>Terminated | 70131-67-8 | NE                       | NE                        | NE                       | NE                              | NE                       | NE                        | NE                               | NE  |

NE = Not Established. See Section 16 for definitions.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION, Continued

### CONTROL PARAMETERS:

**BIOLOGICAL EXPOSURE INDICES:** Currently, there are ACGIH Biological Exposure Indices (BEIs) determined for the components of this product, as follows:

| CHEMICAL:<br>DETERMINANT          | SAMPLING TIME                  | BEI       |
|-----------------------------------|--------------------------------|-----------|
| Isopropanol<br>• Acetone in urine | • End of Shift End of Workweek | • 40 mg/L |

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation. Use a mechanical fan or vent area to outside. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits provided in this section, if applicable. Use a non-sparking, grounded, explosion-proof ventilation system separate from other exhaust ventilation systems. Exhaust system in manner consistent with prevention of release to atmosphere. An eyewash and safety shower should be readily accessible.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Refer to Sections 6, 7 and 13 for information on controlling exposure to this product to the environment.

**PROTECTIVE EQUIPMENT:** The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including U.S. Federal OSHA Respiratory Protection (29 CFR 1910.134), OSHA Eye Protection 29 CFR 1910.133, OSHA Hard Protection 29 CFR 1910.138, OSHA Foot Protection 29 CFR 1910.136 and OSHA Body Protection 29 CFR 1910.132), or equivalent standards of Canada (including CSA Respiratory Standard Z94.4-02, Z94.3-M1982, *Industrial Eye and Face Protectors* and CSA Standard Z195-02, *Protective Footwear*). Please reference applicable regulations and standards for relevant details.

**RESPIRATORY PROTECTION:** Maintain the Oxygen level above 19.5% in the workplace and exposure limits below levels given earlier in this section, if applicable. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard. If necessary, use only respiratory protection authorized in appropriate regulations to assist in equipment selection.

**EYE PROTECTION:** Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations to assist in equipment selection.

**HAND PROTECTION:** Wear butyl rubber, Teflon™, Barricade™, Chemrel™, nitrile or similar gloves for routine industrial use. If necessary, refer to applicable regulations and standards.

**BODY PROTECTION:** Use body protection appropriate for task. If necessary, refer to appropriate regulations to assist in equipment selection.

**HYGIENE:** See Section 7.

## 9. PHYSICAL and CHEMICAL PROPERTIES

**PHYSICAL STATE:** Thin liquid.

**COLOR:** Translucent, milky.

**MOLECULAR FORMULA:** Mixture.

**MOLECULAR WEIGHT:** Mixture.

**ODOR:** Faint.

**ODOR THRESHOLD:** Not established.

**pH:** Not established.

**MELTING/FREEZING POINT:** Not established.

**BOILING POINT:** Not established.

## 9. PHYSICAL and CHEMICAL PROPERTIES, continued

FLASH POINT (Pensky-Martens Closed Tester): >93.3°C (200°F).

EVAPORATION RATE (nBuAc = 1): Not established; based on ingredients the comparative evaporation rate is expected to be <1.

FLAMMABLE LIMITS (in air by volume, %): Not established.

VAPOR PRESSURE, mm Hg @ 50°C: Not established.

RELATIVE VAPOR DENSITY (air = 1): Not established; based on ingredients the relative vapor density is expected to be >1.

SPECIFIC GRAVITY (23°C, water = 1): 1.01

SOLUBILITY: Soluble in water.

COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not established.

AUTOIGNITION TEMPERATURE: Not established.

VISCOSITY (cP): Not established.

VOLATILE ORGANIC COMPOUND CONTENT: 4.32g/L

## 10. STABILITY and REACTIVITY

REACTIVITY: Not considered a reactivity hazard.

CHEMICAL STABILITY: Stable under typical, environmental conditions in a workplace in the absence of contaminants.

DECOMPOSITION PRODUCTS: Combustion: Silicon, nitrogen and carbon oxides. Hydrolysis: None known.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizers, water-reactive materials.

POSSIBILITY OF HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Exposure to incompatible chemicals, high temperatures.

## 11. TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: Not Classified.

Data for Isopropyl Alcohol:

LD<sub>50</sub> (Oral-Rat) 5045 mg/kg

LD<sub>50</sub> (Skin-Rabbit) 12,800 mg/kg

LDLo (unreported, man) = 2770 mg/kg

TDLo (oral, man) = 14,432 mg/kg; Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: dyspnea

TDLo (oral, human) = 223 mg/kg; Behavioral: hallucinations, distorted perceptions; Cardiac: pulse rate; Vascular: BP lowering not characterized in autonomic section TDLo (oral, infant) = 13 gm/kg; Behavioral: somnolence (general depressed activity), irritability; Gastrointestinal: nausea or vomiting

LDLo (oral, man) = 5272 mg/kg; Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: chronic pulmonary edema

LDLo (oral, human) = 3570 mg/kg; Behavioral: coma; Lungs, Thorax, or Respiration: respiratory depression; Gastrointestinal: nausea or vomiting

SKIN CORROSION/IRRITATION: Not Classified.

Data for Isopropyl Alcohol:

Skin Irritancy (rabbit) = 500 mg; mild

## 11. TOXICOLOGICAL INFORMATION, continued

### SERIOUS EYE DAMAGE/IRRITATION:

Not Classified.

Data for Isopropyl Alcohol:

Eye Irritancy (rabbit) = 100 mg; severe

Eye Irritancy (rabbit) = 10 mg; moderate

### RESPIRATORY or SKIN SENSITIZATION:

Not Classified.

### GERM CELL MUTAGENICITY:

Not Classified.

### CARCINOGENICITY:

Not Classified.

**ISOPROPYL ALCOHOL:** ACGIH-TLV-A Compound (Not Classifiable as a Human Carcinogen); IARC-3 Compound (Not Classifiable as to Carcinogenicity to Humans)

### REPRODUCTIVE TOXICITY:

Not Classified.

### SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE):

Not Classified.

Data for Isopropyl Alcohol:

TDLo (oral, rat) = 6480 mg/kg/male 26 weeks pre; Reproductive effects

TCLo (inhalation, rat) = 10,000 ppm/7 hours/female 1–19 days post; Teratogenic effects

### SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE):

Not Classified.

**SYMPTOMS/EFFECTS AFTER INHALATION:** Inhalation is not anticipated to be a significant route of exposure to this product. If mists or sprays of this product are inhaled, they may mildly irritate the nose and other tissues of the upper respiratory system. Symptoms are generally alleviated upon breathing fresh air.

**SYMPTOMS/EFFECTS AFTER EYE OR SKIN CONTACT:** Depending on the duration and concentration of exposure, eye contact may cause tearing and redness. Skin contact may cause mild redness, discomfort, and irritation. Symptoms are generally alleviated upon rinsing. Repeated skin contact may cause dermatitis (dry, red skin).

**SYMPTOMS/EFFECTS AFTER INGESTION:** Ingestion is not anticipated to be a likely route of exposure to this product. If this material is swallowed, it may cause headache, nausea, and vomiting.

**SYMPTOMS/EFFECTS AFTER SKIN ABSORPTION:** Although the Isopropyl Alcohol component of this product can be absorbed through intact skin, skin absorption is not anticipated to cause adverse effects.

## 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**ECOTOXICITY:** This product has not been tested for ecotoxicity. Aquatic toxicity data for components of this product are provided as follows:

#### ISOPROPYL ALCOHOL:

Toxic (*Chlorella pyrenoidosa* algae) = 17,400 mg/L

NOEC (*Daphnia magna*) reproduction = 2,100 mg/L

NOEC (*Daphnia magna*) growth = 757 mg/L

EC<sub>0</sub> (*Pseudomonas putida*, bacteria) 16 hours = 1,050 mg/L

EC<sub>0</sub> (*Microcystis aeruginosa*, algae) 8 days = 1,000 mg/L

EC<sub>0</sub> (*Scenedesmus quadricauda*, green algae) 7 days = 1,800 mg/L

EC<sub>50</sub> (*Daphnia magna*) reproduction = 3,010 mg/L

EC<sub>0</sub> (*Uronema parduczi* Chatton-Lwoff, protozoa) = 3,425 mg/L

LC<sub>0</sub> (*Semolilus atromaculatus*, creek chub) 24 hours = 900 mg/L

#### ISOPROPYL ALCOHOL (continued):

EC<sub>50</sub> (*Entosiphon sulcatum*, protozoa) 72 hours = 4,930 mg/L

EC<sub>50</sub> Microtox™ (*Photobacterium*) test 5 minutes = 22,800 mg/L

LC<sub>50</sub> Streptoxkit F (*Streptocephalus proboscideus*) test 24 hours = 11,600 mg/L

LC<sub>50</sub> (*Daphnia magna*) test 24 hours = 9500 mg/L

LC<sub>50</sub> Rotoxkit F (*Brachionus calyciflorus*) test 24 hours = 28,600 mg/L

LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 48 hours = (average) 1,400 mg/L

LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 48 hours = (range) 900-1,950 mg/L

#### ISOPROPYL ALCOHOL (continued):

LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 98 hours = (average) 1,150 mg/L

LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 98 hours = (range) 750-1,650 mg/L

LC<sub>50</sub> (*Daphnia magna*) = 4,600 mg/L

LC<sub>50</sub> (*Crassus auratus*, goldfish) 24 hours = > 500 mg/L

LC<sub>50</sub> (*Pimephales promelas*, fathead minnow) 1; 24; 48; 72 and 96 hours = 11,830; 11,160; 11,130; 11,130; 11,130 mg/L

LC<sub>50</sub> (*Poecilia reticulata*, guppy) 7 days = 7,060 mg/L

LC<sub>100</sub> (creek chub) 24 hours = 1,100 mg/L

## 12. ECOLOGICAL INFORMATION, continued

**PERSISTENCE AND BIODEGRADABILITY:** The product has not been tested for persistence or biodegradability. The components of this product are relatively stable under ambient environmental conditions. Additional environmental data for components of this product are available as follows:

**DIMETHYLPOLYSILOXANE:**

Water Solubility: Insoluble.

Terrestrial Fate: If released to soil, Dimethyl Siloxane will absorb strongly and will remain essentially immobile. Dimethyl Siloxane will not volatilize to the atmosphere, nor will it biodegrade. Dimethyl Siloxane will not undergo hydrolysis except in clay soils which are known to catalyze this reaction at a rate dependent upon the amount of water present.

Aquatic Fate: If released to an aquatic environment, Dimethyl Siloxane is expected to absorb strongly to sediment and suspended organic matter. Although insoluble in water, Dimethyl Siloxane is not expected to bioconcentrate, due to its inherent hydrophobicity. Dimethyl Siloxane will not bioconcentrate in fish and aquatic environments as this compound is molecularly too large to pass through biological membranes and concentrate in fatty tissue. Dimethyl Siloxane will hydrolyze in water and will not volatilize to the atmosphere.

Atmospheric Fate: If released to the atmosphere, Dimethyl Siloxane will only enter the atmosphere if in aerosol form, due to its heavy molecular weight, very low vapor pressure and liquid physical state. The most likely atmospheric fate process is by dry deposition to the surface of the earth.

**ISOPROPYL ALCOHOL:**

Octanol/Water Partition Coefficient:  $\log P = 0.34-0.5$

Persistence: If released to the soil, Isopropanol will both rapidly evaporate and leach into the ground due to high vapor pressure and low adsorption to soil. If released to water, Isopropanol will volatilize, with an estimated half-life of 5.4 days. If released to the atmosphere, Isopropanol will photodegrade, with an estimated half-life of one to several days. Due to the solubility of Isopropanol in water, rainout may be significant.

Biodegradation: In soil, and water, degradation of Isopropanol has not been determined. If soil degradation is not rapid, it will likely leach to groundwater.

**BIO-ACCUMULATION POTENTIAL:** This product has not been tested for bio-accumulation potential.

**MOBILITY:** This product has not been tested for mobility in soil.

**OTHER ADVERSE EFFECTS:** No components of this product are listed as having ozone depletion potential.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:** It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

**DISPOSAL CONTAINERS:** Waste materials must be placed in and shipped in impermeable containers. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

**PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING:** Wear proper protective equipment when handling waste materials.

**U.S. EPA WASTE NUMBER:** Not applicable.

## 14. TRANSPORTATION INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS:** This product is NOT classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

**TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:** This product is NOT considered as Dangerous Goods, per regulations of Transport Canada.

**INTERNATIONAL AIR TRANSPORT ASSOCIATION DESIGNATION:** This material is NOT considered as dangerous goods, per rules of IATA.

**INTERNATIONAL MARITIME ORGANIZATION (IMO):** This product is NOT considered as dangerous goods, per rules of the IMO.

**TRANSPORT IN BULK ACCORDING TO THE IBC CODE:** Not applicable.

**ENVIRONMENTAL HAZARDS:** This product does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN); components are not specifically listed in Annex III under MARPOL 73/78.

## 15. REGULATORY INFORMATION

### ADDITIONAL U.S. REGULATIONS:

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

| CHEMICAL NAME                                  | SARA 302<br>(40 CFR 355, Appendix A) | SARA 304<br>(40 CFR Table 302.4) | SARA 313<br>(40 CFR 372.65) |
|--|--------------------------------------|----------------------------------|-----------------------------|
| Isopropyl Alcohol<br>(mfg-strong acid process) | No                                   | No                               | Yes                         |

**U.S. SARA THRESHOLD PLANNING QUANTITY:** No Threshold Planning Quantities for this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** There are no specific reportable quantities for this product or its components.

**U.S. TSCA INVENTORY STATUS:** The components of this product are listed on the TSCA Inventory.

### STATE REGULATIONS:

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** No component of this product is on the California Proposition 65 lists.

### ADDITIONAL CANADIAN REGULATIONS:

**CANADIAN DSL/NDL INVENTORY:** The components of this product are listed on the DSL Inventory.

**CANADIAN ENVIRONMENTAL PROTECTION AGENCY (CEPA) PRIORITY SUBSTANCES LISTS:** Not applicable.

## 16. OTHER INFORMATION

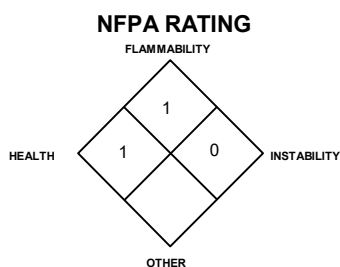
**PREPARED BY:** CHEMICAL SAFETY ASSOCIATES, Inc. • PO Box 1961, Hilo, HI 96721 (800) 969-4846  
NOVUS 2 LLC CHEMISTRY DEPARTMENT • 650 Pelham Boulevard, Suite 100 • St Paul, MN 55114 (952) 944-8000

**REFERENCES AND DATA SOURCES:** Contact the supplier for information.

**METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION:** Bridging principles were used to classify this product.

### REVISION DETAILS:

April 2012: Review and update entire SDS to comply with EU CLP 1272: 2008 and GHS.  
October 2012: Review and update to comply with OSHA's revised Hazard Communication Standard.  
October 2015: Review and update as necessary.  
March 2017: Review and update to particulars of Canada's HPR.  
July 2017: Review and update Canadian distributor, formatting.  
August 2018: Added VOC Content information to Section 9.  
April 2019: Updated company name; new formula  
July 2020: Update Section 8  
October 2020: Update Sections 2 and 11 with new hazard information.



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe

| HAZARDOUS MATERIAL IDENTIFICATION SYSTEM             |                   |                   |                   |
|--|-------------------|-------------------|-------------------|
| <b>HEALTH HAZARD</b>                                 | (BLUE)            | 1                 |                   |
| <b>FLAMMABILITY HAZARD</b>                           | (RED)             | 1                 |                   |
| <b>PHYSICAL HAZARD</b>                               | (YELLOW)          | 0                 |                   |
| PROTECTIVE EQUIPMENT                                 |                   |                   |                   |
| EYES   | RESPIRATORY       | HANDS             | BODY              |
| <br>SEE SECTION 8                                    | <br>SEE SECTION 8 | <br>SEE SECTION 8 | <br>SEE SECTION 8 |
| For Routine Industrial Use and Handling Applications |                   |                   |                   |

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe \* = Chronic hazard

## DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these which are commonly used include the following:

**CAS #:** This is the Chemical Abstract Service Number that uniquely identifies each constituent.

### EXPOSURE LIMITS IN AIR:

**BEI** - ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

**CEILING LEVEL:** The concentration that shall not be exceeded during any part of the working exposure.

**IDLH-Immediately Dangerous to Life and Health:** This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

**LOQ:** Limit of Quantitation.

**MAK:** Federal Republic of Germany Maximum Concentration Values in the workplace.

**NE:** Not Established. When no exposure guidelines are established, an entry of NE is made for reference.

**NIC:** Notice of Intended Change.

**NIOSH CEILING:** The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.

**NIOSH RELs:** NIOSH's Recommended Exposure Limits.

**PEL-Permissible Exposure Limit:** OSHA's Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL that was vacated by Court Order.

**SKIN:** Used when a there is a danger of cutaneous absorption.

**STEL-Short Term Exposure Limit:** Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hr TWA is within the TLV-TWA, PEL-TWA or REL-TWA.

**STEV** – Short Term Exposure Value.

**TLV-Threshold Limit Value:** An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour.

**TWA-Time Weighted Average:** Time Weighted Average exposure concentration for a conventional 8-hr (TLV, PEL) or up to a 10-hr (REL) workday and a 40-hr workweek.

**TWAEV:** Time Weighted Average Exposure Value.

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS:

This rating system was developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

#### HEALTH HAZARD:

**0 (Minimal Hazard):** No significant health risk, irritation of skin or eyes not anticipated.

**Skin Irritation:** Essentially non-irritating. PII or Draize = "0". **Eye Irritation:** Essentially non-irritating, or minimal effects which clear in < 24 hours [e.g. mechanical irritation]. Draize = "0". **Oral Toxicity LD<sub>50</sub> Rat:** < 5000 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** < 2000 mg/kg. **Inhalation Toxicity 4-hrs LC<sub>50</sub> Rat:** < 20 mg/L; **1 (Slight Hazard):** Minor reversible injury may occur; slightly or mildly irritating. **Skin Irritation:** Slightly or mildly irritating. **Eye Irritation:** Slightly or mildly irritating. **Oral Toxicity LD<sub>50</sub> Rat:** > 500-5000 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 1000-2000 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 2-20 mg/L; **2 (Moderate Hazard):** Temporary or transitory injury may occur.

**Skin Irritation:** Moderately irritating; primary irritant; sensitizer. PII or Draize > 0, < 5. **Eye Irritation:** Moderately to severely irritating and/or corrosive; reversible corneal opacity; corneal involvement or irritation clearing in 8-21 days. Draize > 0, ≤ 25. **Oral Toxicity LD<sub>50</sub> Rat:** > 50-500 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 200-1000 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 0.5-2 mg/L; **3 (Serious Hazard):** Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive. **Skin Irritation:** Severely irritating and/or corrosive; may destroy dermal tissue, cause skin burns, dermal necrosis.

**3 (continued):** PII or Draize > 5-8 with destruction of tissue. **Eye Irritation:** Corrosive, irreversible destruction of ocular tissue; corneal involvement or irritation persisting for more than 21 days. Draize > 80 with effects irreversible in 21 days. **Oral Toxicity LD<sub>50</sub> Rat:** > 1-50 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 20-200 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 0.05-0.5 mg/L; **4 (Severe Hazard):** Life-threatening; major or permanent damage may result from single or repeated exposure. **Skin Irritation:** Not appropriate. Do not rate as a "4", based on skin irritation alone. **Eye Irritation:** Not appropriate. Do not rate as a "4", based on eye irritation alone. **Oral Toxicity LD<sub>50</sub> Rat:** ≤ 1 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** ≤ 20 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** ≤ 0.05 mg/L).

#### FLAMMABILITY HAZARD:

**0 (Minimal Hazard-Materials)** that will not burn in air when exposure to a temperature of 815.5°C [1500°F] for a period of 5 minutes.; **1 (Slight Hazard-Materials)** that must be pre-heated before ignition can occur. Material require considerable pre-heating, under all ambient temperature conditions before ignition and combustion can occur, including: Materials that will burn in air when exposed to a temperature of 815.5°C (1500°F) for a period of 5 minutes or less; Liquids, solids and semisolids having a flash point at or above 93.3°C [200°F] (e.g. OSHA Class IIIB, or; Most ordinary combustible materials [e.g. wood, paper, etc.]; **2 (Moderate Hazard-Materials)** that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not, under normal conditions, form hazardous atmospheres in air, but under high ambient temperatures or moderate heating may release vapor in sufficient

quantities to produce hazardous atmospheres in air, including: Liquids having a flash point at or above 37.8°C [100°F]; Solid materials in the form of course dusts that may burn rapidly but that generally do not form explosive atmospheres; Solid materials in a fibrous or shredded form that may burn rapidly and create flash fire hazards (e.g. cotton, sisal, hemp; Solids and semisolids that readily give off flammable vapors.); **3 (Serious Hazard- Liquids and solids)** that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures, or, unaffected by ambient temperature, are readily ignited under almost all conditions, including: Liquids having a flash point below 22.8°C [73°F] and having a boiling point at or above 38°C [100°F] and below 37.8°C [100°F] [e.g. OSHA Class IB and IC]; Materials that on account of their physical form or environmental conditions can form explosive mixtures with air and are readily dispersed in air [e.g., dusts of combustible solids, mists or droplets of flammable liquids]; Materials that burn extremely rapidly, usually by reason of self-contained oxygen [e.g. dry nitrocellulose and many organic peroxides]; **4 (Severe Hazard-Materials)** that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air, and which will burn readily, including: Flammable gases; Flammable cryogenic materials; Any liquid or gaseous material that is liquid while under pressure and has a flash point below 22.8°C [73°F] and a boiling point below 37.8°C [100°F] [e.g. OSHA Class IA; Material that ignite spontaneously when exposed to air at a temperature of 54.4°C [130°F] or below [e.g. pyrophoric].

#### PHYSICAL HAZARD:

**0 (Water Reactivity):** Materials that do not react with water. **Organic Peroxides:** Materials that are normally stable, even under fire conditions and will not react with water.

**Explosives:** Substances that are Non-Explosive. **Unstable Compressed Gases:** No Rating. **Pyrophorics:** No Rating. **Oxidizers:** No "0" rating allowed. **Unstable Reactives:** Substances that will not polymerize, decompose, condense or self-react; **1 (Water Reactivity):** Materials that change or decompose upon exposure to moisture. **Organic Peroxides:** Materials that are normally stable, but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy. **Explosives:** Division 1.5 & 1.6 substances that are very insensitive explosives or that do not have a mass explosion hazard. **Compressed Gases:** Pressure below OSHA definition. **Pyrophorics:** No Rating. **Oxidizers:** Packaging Group III; **Solids:** any material that in either concentration tested, exhibits a mean burning time less than or equal to the mean burning time of a 3:7 potassium bromate/cellulose mixture and the criteria for Packing Group I and II are not met. **Liquids:** any material that exhibits a mean pressure rise time less than or equal to the pressure rise time of a 1:1 nitric acid (65%)/cellulose mixture and the criteria for Packing Group I and II are not met. **Unstable Reactives:** Substances that may decompose, condense or self-react, but only under conditions of high temperature and/or pressure and have little or no potential to cause significant heat generation or explosive hazard. Substances that readily undergo hazardous polymerization in the absence of inhibitors.; **2 (Water Reactivity):** Materials that may react violently with water. **Organic Peroxides:** Materials that, in themselves, are normally unstable and will readily undergo violent chemical change, but will not detonate. These materials may also react violently with water. **Explosives:** Division 1.4 – Explosive substances where the explosive effect is largely confined to the package and no projection of fragments of appreciable size or range are expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package. **Compressed Gases:** Pressurized and meet OSHA definition but < 514.7 psi absolute at 21.1°C (70°F) [500 psig]. **Pyrophorics:** No Rating. **Oxidizers:** Packing Group II; **Solids:** any material that, either in concentration tested, exhibits a mean burning time of less than or equal to the mean burning time of a 2:3 potassium bromate/cellulose mixture and the criteria for Packing Group I are not met. **Liquids:** any material that exhibits a mean pressure rise time less than or equal to the pressure rise of a 1:1 aqueous sodium chlorate solution (40%)/cellulose mixture and the criteria for Packing Group I are not met. **Unstable Reactives:** Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure, but have a low potential for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or oxygen at room temperature; **3 (Water Reactivity):** Materials that may form explosive reactions with water. **Organic Peroxides:** Materials that are capable of detonation or explosive reaction, but require a strong initiating source, or must be heated under confinement before initiation; or materials that react explosively with water. **Explosives:** Division 1.2 – Explosive substances that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but do not have a mass explosion hazard. **Compressed Gases:** Pressure ≥ 514.7 psi absolute at 21.1°C (70°F) [500 psig]. **Pyrophorics:** No Rating. **Oxidizers:** Packing Group I; **Solids:** any material that, in either concentration tested, exhibits a mean burning time less than the mean burning time of a 3:2 potassium bromate/cellulose mixture. **Oxidizers:** **Liquids:** Any material that spontaneously ignites when mixed with cellulose in a 1:1 ratio, or which exhibits a mean pressure rise time less than the pressure rise time of a 1:1 perchloric acid (50%)/cellulose mixture. **Unstable Reactives:** Substances that may polymerize, decompose, condense or self-react at ambient temperature and/or pressure and have a moderate potential to cause significant heat generation or explosion.; **4 (Water Reactivity):** Materials that react explosively with water without requiring heat or confinement. **Organic Peroxides:** Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressures. **Explosives:** Division 1.1 & 1.2-explosive substances that have a mass explosion hazard or have a projection hazard. A mass explosion is one that affects almost the entire load instantaneously. **Compressed Gases:** No Rating. **Pyrophorics:** Add to the definition of Flammability "4". **Oxidizers:** No "4" rating. **Unstable Reactives:** Substances that may polymerize, decompose, condense or self-react at ambient temperature and/or pressure and have a high potential to cause significant heat generation or explosion).

## DEFINITIONS OF TERMS (Continued)

### NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:

**HEALTH HAZARD: 0** (materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 10,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 200 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 2000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 2000 mg/kg. Materials that are essentially non-irritating to the respiratory tract, eyes and skin. **1** (materials that, under emergency conditions, can cause significant irritation): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 5,000 ppm but less than or equal to 10,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 10 mg/L but less than or equal to 200 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 1000 mg/kg but less than or equal to 2000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 500 mg/kg but less than or equal to 2000 mg/kg. Materials that cause slight to moderate irritation to the respiratory tract, eyes and skin. **2** (materials that, under emergency conditions, can cause temporary incapacitation or residual injury): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 3,000 ppm but less than or equal to 5,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 2 mg/L but less than or equal to 10 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 200 mg/kg but less than or equal to 1000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 5000 ppm and that does not meet the criteria for either degree of hazard 3 or degree of hazard 4. Compressed liquefied gases with boiling points between -30°C (-22°F) and -55°C (-66.5°F) that cause severe tissue damage, depending on duration of exposure. Materials that are respiratory irritants. Materials that cause severe, but reversible irritation to the eyes or are lachrymators. Materials that are primary skin irritants or sensitizers. **3** (materials that, under emergency conditions, can cause serious or permanent injury): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 1,000 ppm but less than or equal to 3,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 5 mg/kg but less than or equal to 50 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 3000 ppm and that does not meet the criteria for degree of hazard 4. Compressed liquefied gases with boiling points between -30°C (-22°F) and -55°C (-66.5°F) that cause frostbite and irreversible tissue damage. Materials that are respiratory irritants. Cryogenic gases that cause frostbite and irreversible tissue damage. Materials that are corrosive to the respiratory tract. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials that are corrosive to the skin. **4** (materials that, under emergency conditions, can be lethal): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity less than or equal to 1,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is less than or equal to 0.5 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is less than or equal to 40 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is less than or equal to 5 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 1000 ppm. **4** (materials that, under emergency conditions, can be lethal): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity less than or equal to 1,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is less than or equal to 0.5 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is less than or equal to 40 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is less than or equal to 5 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 1000 ppm.

**FLAMMABILITY HAZARD: 0** Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand: Materials that will not burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with Annex D. **1** Materials that must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur: Materials that will burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with Annex D. Liquids, solids and semisolids having a flash point at or above 93.4°C (200°F) (i.e. Class IIIB liquids). Liquids with a flash point greater than 35°C (95°F) that do not sustain combustion when tested using the *Method of Testing for Sustained Combustibility*, per 49 CFR 173, Appendix H or the UN *Recommendation on the Transport of Dangerous Goods, Model Regulations* (current edition) and the related *Manual of Tests and Criteria* (current edition). Liquids with a flash point greater than 35°C (95°F) in a water-miscible solution or dispersion with a water non-combustible liquid/solid content of more than 85 percent by weight. Liquids that have no fire point when tested by ASTM D 92 Standard Test Method for Flash and Fire Points by Cleveland Open Cup, up to a boiling point of the liquid or up to a temperature at which the sample being tested shows an obvious physical change. Combustible pellets with a representative diameter of greater than 2 mm (10 mesh). Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed up flash point of the solvent. Most ordinary combustible materials. **2** Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not under normal conditions form hazardous atmospheres with air, but under high ambient temperatures or under

moderate heating could release vapor in sufficient quantities to produce hazardous atmospheres with air: Liquids having a flash point at or above 37.8°C (100°F) and below 93.4°C (200°F) (i.e. Class II and Class IIIA liquids.) Solid materials in the form of powders or coarse dusts of representative diameter between 420 microns (40 mesh) and 2 mm (10 mesh) that burn rapidly but that generally do not form explosive mixtures in air. Solid materials in fibrous or shredded form that burn rapidly and create flash fire hazards, such as cotton, sisal and hemp. Solids and semisolids that readily give off flammable vapors. Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **3** Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures or, though unaffected by ambient temperatures, are readily ignited under almost all conditions: Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 37.8°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (73°F) and below 37.8°C (100°F) (i.e. Class IB and IC liquids). Materials that, on account of their physical form or environmental conditions, can form explosive mixtures with air and are readily dispersed in air. Flammable or combustible dusts with a representative diameter less than 420 microns (40 mesh). Materials that burn with extreme rapidity, usually by reason of self-contained oxygen (e.g. dry nitrocellulose and many organic peroxides). Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **4** Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily: Flammable gases. Flammable cryogenic materials. Any liquid or gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IA liquids). Materials that ignite when exposed to air, Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **INSTABILITY HAZARD: 0** Materials that in themselves are normally stable, even under fire conditions: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. **1** Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. **2** Materials that readily undergo violent chemical change at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. **3** Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. **4** Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater. Materials that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures.

### FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the **National Fire Protection Association (NFPA)**. **Flash Point** - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. **Autoignition Temperature**: The minimum temperature required to initiate combustion in air with no other source of ignition. **LEL** - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. **UEL** - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

### TOXICOLOGICAL INFORMATION:

**Human and Animal Toxicology:** Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD<sub>50</sub>** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC<sub>50</sub>** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m<sup>3</sup>** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TD<sub>0</sub>**, **LDLo**, and **LD<sub>0</sub>**, or **TC**, **TC<sub>0</sub>**, **LCLo**, and **LC<sub>0</sub>**, the lowest dose (or concentration) to cause lethal or toxic effects. **Cancer Information:** The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used.

**Other Information:** **BEI** - ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

## DEFINITIONS OF TERMS (Continued)

### ECOLOGICAL INFORMATION:

EC is the effect concentration in water. **BCF** = Bioconcentration Factor, which is used to determine if a substance will concentrate in lifeforms which consume contaminated plant or animal matter. **TL<sub>m</sub>** = median threshold limit; Coefficient of Oil/Water Distribution is represented by **log K<sub>ow</sub>** or **log K<sub>oc</sub>** and is used to assess a substance's behavior in the environment.

### REGULATORY INFORMATION:

**U.S. and CANADA:** **ACGIH:** American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. This section explains the impact of various laws and regulations on the material. **EPA** is the U.S.

Environmental Protection Agency. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Superfund Amendments and Reauthorization Act (**SARA**); the Canadian Domestic/Non-Domestic Substances List (**DSL/NDSL**); the U.S. Toxic Substance Control Act (**TSCA**); Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA or Superfund**); and various state regulations. This section also includes information on the precautionary warnings which appear on the material's package label. **OSHA** - U.S. Occupational Safety and Health Administration.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|   |  |  |                                   |                                  |
|---|--|--|-----------------------------------|----------------------------------|
| <u>Company Name</u><br>Nu-Calgon Wholesaler, Inc. | <u>Phone Number</u><br>(314) 469-7000 / (800) 554-5499 |  | <u>CHEMTREC</u><br>(800) 424-9300 |                                  |
| <u>Street Address</u><br>2008 Altom Court         | <u>City</u><br>St. Louis                               | <u>State</u><br>MO                           | <u>Postal Code</u><br>63146-4151  | <u>Last Update</u><br>10/25/12   |
| <u>Product Name</u><br>Nu-blast, Aerosol          | <u>Product Number</u><br>4290-75                       | <u>Product Use</u><br>Condenser Coil Cleaner |                                   | <u>EPA Registration #</u><br>N/A |

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

| <b>Hazardous Ingredients</b> | <b>% By Wt.</b> | <b>CAS Number</b> | <b>TLV</b> | <b>PEL</b> |
|------------------------------|-----------------|-------------------|------------|------------|
| Trichloroethylene            | 90 - 98         | 79-01-6           | 50 ppm     | 50 ppm     |
| Carbon dioxide               | < 5             | 124-38-9          | 5000 ppm   | 5000 ppm   |
|                              |                 |                   |            |            |

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Warning. Ensure adequate ventilation. Avoid breathing vapors or mists. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C). Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material KEEP OUT OF REACH OF CHILDREN

### **Potential Health Effects**

**Eyes:** Irritating to eyes.

**Skin:** Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

**Ingestion:** Aspiration may cause pulmonary oedema and pneumonitis. nausea.

**Inhalation:** Inhalation of high vapour concentrations may cause nasal & respiratory irritation and symptoms like headache, dizziness, tiredness, nausea, vomiting and possible unconsciousness.

**Chronic Exposure:** Prolonged exposure may cause chronic effects such as. Liver disorders. Kidney disorders. Lung damage. cardiac irregularities. Repeated and prolonged exposure to solvents may cause brain and nervous system damage. May cause disorder and damage to the spleen. In chronic inhalation tests with rats and mice, Trichloroethylene caused an increased incidence of tumours of a type which is routinely observed in these species.

**Carcinogenicity:** CA Prop 65 carcinogen - Trichloroethylene

**Medical Conditions Aggravated by Exposure:** May aggravate existing eye, skin, or upper respiratory conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist

**Skin:** Wash off with soap and water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician

**Ingestion:** DO NOT INDUCE VOMITING. Aspiration hazard. Clean mouth with water and afterwards drink plenty of water. Immediate medical attention is required

**Inhalation:** Move to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth. Obtain medical attention

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** No Data. °F

**Autoignition Temp:** No Data. °C/No Data. °F

**Hazardous Products of Combustion:** Carbon oxides, Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts).

**Flammable Limits in Air:** No Data.

**Extinguishing Media:** Foamy spray. Dry chemical. Carbon dioxide (CO2).

**Fire and Explosion Hazards:** Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C).

**Special Firefighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of in accordance with local regulations.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Wear personal protective equipment. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material.

**Storage Requirements:** KEEP OUT OF REACH OF CHILDREN. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C).

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Eye Protection:** Safety glasses with side-shields.

**Protective Clothing:** Neoprene gloves

**Exposure Guidelines:** See Section 2

**Specific Engineering Controls (such as ventilation, enclosed process):** Ensure adequate ventilation, especially in confined areas

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|   |  |  |
|---|--|--|
| <b>Physical Form:</b> Aerosol               | <b>Freezing Point:</b> No Data.°C/No Data.°F           | <b>% Volatile by Weight:</b> 96.5 %                                    |
| <b>Color:</b> Clear                         | <b>Vapor Density [air =1]:</b> No Data.                | <b>Evaporation Rate:</b> 2.1 (concentrate only) ( n-butyl acetate = 1) |
| <b>Odor:</b> Ethereal                       | <b>Vapor Pressure:</b> PSIG @ 70°F (Aerosols): 85-100. | <b>Specific Gravity:</b> 1.45  |
| <b>Boiling Point:</b> No Data.°C/No Data.°F | <b>Solubility in Water:</b> Insoluble.                 | <b>pH (concentrate):</b> No Data.                                      |

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Hazardous Polymerization:** Hazardous polymerization does not occur

**Incompatibilities:** Reactive metals. Magnesium. Strong oxidizing agents. Product may react with aluminum if immersed in liquid concentrate trichloroethylene for extended periods.

**Reactive Conditions to avoid:** Heat, flames and sparks. Extremes of temperature and direct sunlight. Do not expose to temperatures above 54°C .

**Decomposition Products:** Carbon oxides , Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts)

## SECTION 11 – TOXICOLOGICAL INFORMATION

| <u>Hazardous Ingredients</u> | <u>CAS #</u> | <u>EINECS #</u> | <u>LD 50 of Ingredient</u><br>(Specify Species)            | <u>LC50 of Ingredient</u><br>(Specify Species) |
|------------------------------|--------------|-----------------|--|--|
| Trichloroethylene            | 79-01-6      | N/D             | Oral LD50 Rat: 5650 mg/kg;<br>Dermal LD50 Rabbit: >20 g/kg | Inhalation LC50 Mouse: 8450 ppm/4H;            |
| Carbon dioxide               | 124-38-9     | N/D             | No Data.   | No Data.                                       |
|                              |              |                 |  |  |
|                              |              |                 |  |  |

## SECTION 12 – ECOLOGICAL INFORMATION

| <u>Hazardous Ingredients</u> | <u>Aquatic Toxicity Data</u>                        |
|------------------------------|---|
| Trichloroethylene            | 96 Hr LC50 fathead minnow: 44.1 mg/L (flow-through) |
| Carbon dioxide               | No Data.  |
|                              |   |
|                              |   |

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Should not be released into the environment. Dispose of in accordance with local regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

**Special Shipping Information:** No Data.

| <u>Purview</u>        | <u>Proper Shipping Name</u> | <u>UN Number</u> | <u>Packing Group</u> | <u>Hazard Class</u> |
|-----------------------|-----------------------------|------------------|----------------------|---------------------|
| <b>DOT</b><br>(Land)  | Consumer Commodity ORM-D    | No Data.         | No Data.             | No Data.            |
| <b>IMO</b><br>(Water) | No Data.                    | No Data.         | No Data.             | No Data.            |
| <b>ICAO</b><br>(Air)  | Aerosols, Non-Flammable     | UN1950           | No Data.             | 2.2                 |

## SECTION 15 – REGULATORY INFORMATION

|  |   |
|--|---|
| <b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)     | D1B, D2A, D2B   |
| <b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)                | Yes - Trichloroethylene   |
| <b>OSHA:</b> (Occupational Safety & Health Administration)                         | See Section 2   |
| <b>TSCA:</b> (Toxic Substance Control Act)   | Present   |
| <b>VOC:</b> (volatile Organic Compounds)   | 96.5 %  |
| <b>CPR:</b> (Canadian Controlled Products Regulations)                             | This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. |
| <b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)     | No Data.  |
| <b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List) | Present   |
| <b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)               | Trichloroethylene - 100 lb RQ   |
| <b>IDL:</b> (Canadian Ingredient Disclosure List)                                  | No Data.  |
| <b>NFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)             | Health=2; Fire=0; Reactivity=0<br>Personal protective equipment = B   |

## SECTION 16 – OTHER INFORMATION

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# SAFETY DATA SHEET

Revision Date 26-Jan-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 3H AVIATION FORM-A-GASKET #3 SEALANT .25PT

### Other means of identification

**Product Code** 80019

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                       |             |
|-----------------------|-------------|
| Acute toxicity - Oral | Category 3  |
| Skin sensitization    | Category 1  |
| Carcinogenicity       | Category 1A |
| Flammable liquids     | Category 2  |

### Label elements

#### **Emergency Overview**

#### **Danger**

Toxic if swallowed  
May cause an allergic skin reaction  
May cause cancer  
Highly flammable liquid and vapor



**Appearance** Dark brown

**Physical state** Liquid

**Odor** Alcohol

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see supplemental first aid instructions on this label)  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Harmful to aquatic life with long lasting effects

Unknown acute toxicity

54.89515% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

| Chemical Name | CAS No     | Weight-% | Trade Secret |
|---------------|------------|----------|--------------|
| VEGETABLE OIL | 68187-84-8 | 15 - 40  | *            |
| ROSIN         | 8050-09-7  | 10 - 30  | *            |
| TALC          | 14807-96-6 | 10 - 30  | *            |

|                        |          |         |   |
|------------------------|----------|---------|---|
| ETHANOL                | 64-17-5  | 10 - 30 | * |
| 2-PROPANOL             | 67-63-0  | 1 - 5   | * |
| METHYL ISOBUTYL KETONE | 108-10-1 | 0.1 - 1 | * |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Get medical advice/attention if you feel unwell.   |
| <b>Eye contact</b>                        | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Skin contact</b>                       | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Wash contaminated clothing before reuse.     |
| <b>Inhalation</b>                         | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.   |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.  |

##### Most important symptoms and effects, both acute and delayed

**Symptoms** See section 2 for more information.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide (CO2), Dry chemical, Foam

##### Unsuitable extinguishing media

None.

##### Specific hazards arising from the chemical

Highly flammable.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Chemical Name                      | ACGIH TLV  | OSHA PEL  | NIOSH IDLH   |
|------------------------------------|--|---|--|
| ROSIN<br>8050-09-7                 | -  | (vacated) TWA: 0.1 mg/m <sup>3</sup><br>Formaldehyde  | TWA: 0.1 mg/m <sup>3</sup> Formaldehyde  |
| TALC<br>14807-96-6                 | TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction | (vacated) TWA: 2 mg/m <sup>3</sup> respirable dust <1% Crystalline silica, containing no Asbestos<br>TWA: 20 mppcf if 1% Quartz or more, use Quartz limit                         | IDLH: 1000 mg/m <sup>3</sup><br>TWA: 2 mg/m <sup>3</sup> containing no Asbestos and <1% Quartz respirable dust |
| ETHANOL<br>64-17-5                 | STEL: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup>  | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup>   |
| 2-PROPANOL<br>67-63-0              | STEL: 400 ppm<br>TWA: 200 ppm  | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup> | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | STEL: 75 ppm<br>TWA: 20 ppm  | TWA: 100 ppm<br>TWA: 410 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 205 mg/m <sup>3</sup><br>(vacated) STEL: 75 ppm<br>(vacated) STEL: 300 mg/m <sup>3</sup>    | IDLH: 500 ppm<br>TWA: 50 ppm<br>TWA: 205 mg/m <sup>3</sup><br>STEL: 75 ppm<br>STEL: 300 mg/m <sup>3</sup>      |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

|                             |  |
|-----------------------------|--|
| <b>Engineering Controls</b> | Showers<br>Eyewash stations<br>Ventilation systems |
|-----------------------------|--|

**Individual protection measures, such as personal protective equipment**

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | Wear safety glasses with side shields (or goggles).  |
| <b>Skin and body protection</b>       | Wear protective gloves and protective clothing.  |
| <b>Respiratory protection</b>         | Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.  |
| <b>General Hygiene Considerations</b> | Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. |

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Dark brown               |
| <b>Odor</b>           | Alcohol                  |
| <b>Odor threshold</b> | No information available |

| <b>Property</b>                       | <b>Values</b>            | <b>Remarks • Method</b> |
|---------------------------------------|--------------------------|-------------------------|
| <b>pH</b>                             | No information available |                         |
| <b>Melting point / freezing point</b> | No information available |                         |
| <b>Boiling point / boiling range</b>  | 82 °C / 180 °F           |                         |
| <b>Flash point</b>                    | 16 °C / 61 °F            |                         |
| <b>Evaporation rate</b>               | 7.7                      | Ether = 1               |
| <b>Flammability (solid, gas)</b>      | No information available |                         |
| <b>Flammability Limit in Air</b>      |                          |                         |
| Upper flammability limit:             | 12%                      |                         |
| Lower flammability limit:             | 2.0                      |                         |
| <b>Vapor pressure</b>                 | 33 mm Hg                 |                         |
| <b>Vapor density</b>                  | 2.07                     | Air = 1                 |
| <b>Relative density</b>               | 1.090-1.114              |                         |
| <b>Water solubility</b>               | Partially soluble        |                         |
| <b>Solubility in other solvents</b>   | No information available |                         |
| <b>Partition coefficient</b>          | No information available |                         |
| <b>Autoignition temperature</b>       | No information available |                         |
| <b>Decomposition temperature</b>      | No information available |                         |
| <b>Kinematic viscosity</b>            | No information available |                         |
| <b>Dynamic viscosity</b>              | No information available |                         |
| <b>Explosive properties</b>           | No information available |                         |
| <b>Oxidizing properties</b>           | No information available |                         |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | 19.4%                    |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents

**Hazardous Decomposition Products**

Carbon oxides, Aldehydes, Carboxylic acids

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.  |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.    |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis. May cause sensitization by skin contact. |
| <b>Ingestion</b>    | Toxic if swallowed.   |

| Chemical Name                      | Oral LD50                              | Dermal LD50             | Inhalation LC50                       |
|------------------------------------|--|-------------------------|---------------------------------------|
| ROSIN<br>8050-09-7                 | = 3 mg/kg ( Rat ) = 7600 mg/kg ( Rat ) | > 2500 mg/kg ( Rabbit ) | = 1.5 mg/L ( Rat ) 4 h                |
| ETHANOL<br>64-17-5                 | = 7060 mg/kg ( Rat )                   | -                       | = 124.7 mg/L ( Rat ) 4 h              |
| 2-PROPANOL<br>67-63-0              | = 1870 mg/kg ( Rat )                   | = 4059 mg/kg ( Rabbit ) | = 72600 mg/m <sup>3</sup> ( Rat ) 4 h |
| METHYL ISOBUTYL KETONE<br>108-10-1 | = 2080 mg/kg ( Rat )                   | = 3000 mg/kg ( Rabbit ) | = 8.2 mg/L ( Rat ) 4 h                |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                         | ACGIH | IARC     | NTP   | OSHA |
|---------------------------------------|-------|----------|-------|------|
| TALC<br>14807-96-6                    | -     | Group 3  | -     | -    |
| ETHANOL<br>64-17-5                    | A3    | Group 1  | Known | X    |
| 2-PROPANOL<br>67-63-0                 | -     | Group 1  | -     | X    |
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | A3    | Group 2B | -     | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Chronic toxicity**

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

**Target Organ Effects**

Blood, Central nervous system, Central Vascular System (CVS), Eyes, Liver, Reproductive System, Respiratory system, Skin, Thyroid.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 6 mg/kg

ATEmix (dermal) 3537 mg/kg

ATEmix (inhalation-dust/mist) 23.6 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

37.08865% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name                      | Algae/aquatic plants  | Fish   | Crustacea   |
|------------------------------------|---|--|---|
| ROSIN<br>8050-09-7                 | 400: 72 h Desmodesmus subspicatus mg/L EC50   | -  | 3.8 - 5.4: 48 h Daphnia magna mg/L EC50   |
| TALC<br>14807-96-6                 | -   | 100: 96 h Brachydanio rerio g/L LC50 semi-static   | -   |
| ETHANOL<br>64-17-5                 | -   | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |
| 2-PROPANOL<br>67-63-0              | 1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50 | 11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50                   | 13299: 48 h Daphnia magna mg/L EC50   |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 400: 96 h Pseudokirchneriella subcapitata mg/L EC50                                       | 496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through   | 170: 48 h Daphnia magna mg/L EC50   |

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

| Chemical Name                      | Partition coefficient |
|------------------------------------|-----------------------|
| ETHANOL<br>64-17-5                 | -0.32                 |
| 2-PROPANOL<br>67-63-0              | 0.05                  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 1.19                  |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

| Chemical Name                         | RCRA | RCRA - Basis for Listing          | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------------------|------|-----------------------------------|------------------------|------------------------|
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | -    | Included in waste stream:<br>F039 | -                      | U161                   |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name         | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| ETHANOL<br>64-17-5    | Toxic<br>Ignitable                |
| 2-PROPANOL<br>67-63-0 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION****DOT**

**UN/ID no** 1866  
**Proper shipping name:** Resin, solution, Limited Quantity (LQ)  
**Hazard Class** 3  
**Packing Group** II  
**Emergency Response Guide Number** 127

**IATA**

**UN/ID no** ID 8000  
**Proper shipping name:** Consumer commodity  
**Hazard Class** 9  
**ERG Code** 9L

**IMDG**

**UN/ID no** 1866  
**Proper shipping name:** Resin, solution, Limited Quantity (LQ)  
**Hazard Class** 3  
**Packing Group** II  
**EmS-No** F-E, S-E

**15. REGULATORY INFORMATION****International Inventories**

**TSCA** Complies  
**DSL/NDL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Does not comply  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name        | SARA 313 - Threshold Values % |
|----------------------|-------------------------------|
| 2-PROPANOL - 67-63-0 | 1.0                           |

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name                      | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|------------------------------------|--------------------------|----------------|--|
| METHYL ISOBUTYL KETONE<br>108-10-1 | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name                     | California Proposition 65   |
|-----------------------------------|-----------------------------|
| ETHANOL - 64-17-5                 | Carcinogen<br>Developmental |
| METHANOL - 67-56-1                | Developmental               |
| METHYL ISOBUTYL KETONE - 108-10-1 | Carcinogen<br>Developmental |

**U.S. State Right-to-Know Regulations**

| Chemical Name                      | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| TALC<br>14807-96-6                 | X          | X             | X            |
| ETHANOL<br>64-17-5                 | X          | X             | X            |
| WATER<br>7732-18-5                 | -          | -             | X            |
| 2-PROPANOL<br>67-63-0              | X          | X             | X            |
| METHANOL<br>67-56-1                | X          | X             | X            |
| METHYL ISOBUTYL KETONE<br>108-10-1 | X          | X             | X            |

---

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

|                    |                         |                       |                           |                              |
|--------------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b><u>NFPA</u></b> | <b>Health hazards</b> 2 | <b>Flammability</b> 3 | <b>Instability</b> 0      | -                            |
| <b><u>HMIS</u></b> | <b>Health hazards</b> 2 | <b>Flammability</b> 3 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

**Revision Date** 26-Jan-2015

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Revision Date 08-Jun-2021

Version 12

## 1. IDENTIFICATION

### Product identifier

**Product Name** 2BR FORM A GASKET #2 SEALANT 3OZ

### Other means of identification

**Product Code** 80016

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity

Category 1A

### Label elements

#### **Emergency Overview**

#### Signal word

**Danger**

May cause cancer



|                         |  |                     |
|-------------------------|--|---------------------|
| <b>Appearance</b> Black | <b>Physical state</b> Paste / Gel Liquid | <b>Odor</b> Alcohol |
|-------------------------|--|---------------------|

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity

2.14 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical name          | CAS No     | Weight-% |
|------------------------|------------|----------|
| KAOLIN                 | 1332-58-7  | 30 - 60  |
| FUMARATED RESIN        | 65997-04-8 | 10 - 30  |
| ETHANOL                | 64-17-5    | 5 - 10   |
| 2-PROPANOL             | 67-63-0    | 1 - 5    |
| CRYSTALLINE SILICA     | 14808-60-7 | 1 - 5    |
| TITANIUM DIOXIDE       | 13463-67-7 | 0.1 - 1  |
| CARBON BLACK           | 1333-86-4  | 0.1 - 1  |
| METHYL ISOBUTYL KETONE | 108-10-1   | 0.1 - 1  |

**4. FIRST AID MEASURES****Description of first aid measures**

|   |  |
|---|--|
| <b>General advice</b>                     | Get medical advice/attention if you feel unwell.   |
| <b>Eye contact</b>                        | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Skin contact</b>                       | IF ON SKIN: Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.                                       |
| <b>Inhalation</b>                         | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to  |

protect themselves.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Carbon dioxide (CO2), Use dry chemical, Foam

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

None in particular.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Use personal protective equipment as required.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in a well-ventilated place. Keep cool.

**Incompatible materials** Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical name                      | ACGIH TLV  | OSHA PEL   | NIOSH IDLH  |
|------------------------------------|--|--|---|
| KAOLIN<br>1332-58-7                | TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction   | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust  |
| ETHANOL<br>64-17-5                 | STEL: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup>   | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup>  |
| 2-PROPANOL<br>67-63-0              | STEL: 400 ppm<br>TWA: 200 ppm  | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup>  | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>   |
| CRYSTALLINE SILICA<br>14808-60-7   | TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter   | TWA: 50 µg/m <sup>3</sup> TWA: 50 µg/m <sup>3</sup> excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust<br>: (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction<br>: (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction | IDLH: 50 mg/m <sup>3</sup> respirable dust<br>TWA: 0.05 mg/m <sup>3</sup> respirable dust   |
| TITANIUM DIOXIDE<br>13463-67-7     | TWA: 10 mg/m <sup>3</sup>  | TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust  | IDLH: 5000 mg/m <sup>3</sup><br>TWA: 2.4 mg/m <sup>3</sup> CIB 63 fine<br>TWA: 0.3 mg/m <sup>3</sup> CIB 63 ultrafine, including engineered nanoscale     |
| CARBON BLACK<br>1333-86-4          | TWA: 3 mg/m <sup>3</sup> inhalable particulate matter  | TWA: 3.5 mg/m <sup>3</sup><br>(vacated) TWA: 3.5 mg/m <sup>3</sup>   | IDLH: 1750 mg/m <sup>3</sup><br>TWA: 3.5 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup> Carbon black in presence of Polycyclic aromatic hydrocarbons PAH |
| METHYL ISOBUTYL KETONE<br>108-10-1 | STEL: 75 ppm<br>TWA: 20 ppm  | TWA: 100 ppm<br>TWA: 410 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 205 mg/m <sup>3</sup><br>(vacated) STEL: 75 ppm<br>(vacated) STEL: 300 mg/m <sup>3</sup>   | IDLH: 500 ppm<br>TWA: 50 ppm<br>TWA: 205 mg/m <sup>3</sup><br>STEL: 75 ppm<br>STEL: 300 mg/m <sup>3</sup>   |

NIOSH IDLH *Immediately Dangerous to Life or Health*

#### **Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

##### **Engineering Controls**

Showers  
Eyewash stations  
Ventilation systems

#### Individual protection measures, such as personal protective equipment

##### **Eye/face protection**

Wear safety glasses with side shields (or goggles).

##### **Skin and body protection**

Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection**

Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Paste / Gel Liquid       |
| <b>Appearance</b>     | Black                    |
| <b>Odor</b>           | Alcohol                  |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                | <u>Values</u>                    | <u>Remarks • Method</u> |
|--------------------------------|----------------------------------|-------------------------|
| pH                             | No information available         |                         |
| Melting point / freezing point | No information available         |                         |
| Boiling point / boiling range  | 82 °C / 179.6 °F                 |                         |
| Flash point                    | No information available °C / °F | ASTM D 4359             |
| Evaporation rate               | 7.7                              | Ether = 1               |
| Flammability (solid, gas)      | No information available         |                         |
| Flammability Limit in Air      |                                  |                         |
| Upper flammability limit:      | No information available         |                         |
| Lower flammability limit:      | No information available         |                         |
| Vapor pressure                 | 33 mm Hg @ 68°F                  |                         |
| Vapor density                  | 2.0                              | Air = 1                 |
| Relative density               | 1.5                              |                         |
| Water solubility               | Partially soluble                |                         |
| Solubility(ies)                | No information available         |                         |
| Partition coefficient          | No information available         |                         |
| Autoignition temperature       | No information available         |                         |
| Hyphen                         | No information available         |                         |
| Kinematic viscosity            | No information available         |                         |
| Dynamic viscosity              | No information available         |                         |
| Explosive properties           | No information available         |                         |
| Oxidizing properties           | No information available         |                         |

**Other Information**

|   |                          |
|---|--------------------------|
| <b>Softening point</b>                                    | No information available |
| <b>Molecular weight</b>                                   | No information available |
| <b>VOC content</b>  | 11%                      |
| <b>Density</b>  | No information available |
| <b>Bulk density</b>                                       | No information available |
| <b>SADT (self-accelerating decomposition temperature)</b> | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available

**Chemical stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Excessive heat.

**Incompatible materials**

Strong oxidizing agents

### Hazardous Decomposition Products

Carbon oxides

Aldehydes

Carboxylic acids

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.   |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.   |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.  |

| Chemical name                      | Oral LD50             | Dermal LD50             | Inhalation LC50                       |
|------------------------------------|-----------------------|-------------------------|---------------------------------------|
| KAOLIN<br>1332-58-7                | > 5000 mg/kg ( Rat )  | > 5000 mg/kg ( Rat )    | -                                     |
| FUMARATED RESIN<br>65997-04-8      | > 2000 mg/kg ( Rat )  | -                       | -                                     |
| ETHANOL<br>64-17-5                 | = 7060 mg/kg ( Rat )  | -                       | = 124.7 mg/L ( Rat ) 4 h              |
| 2-PROPANOL<br>67-63-0              | 5050 mg/kg            | 12800 mg/kg             | = 72600 mg/m <sup>3</sup> ( Rat ) 4 h |
| TITANIUM DIOXIDE<br>13463-67-7     | > 10000 mg/kg ( Rat ) | -                       | -                                     |
| CARBON BLACK<br>1333-86-4          | > 15400 mg/kg ( Rat ) | -                       | > 4.6 mg/m <sup>3</sup> ( Rat ) 4 h   |
| METHYL ISOBUTYL KETONE<br>108-10-1 | = 2080 mg/kg ( Rat )  | = 3000 mg/kg ( Rabbit ) | 2000 - 4000 ppm ( Rat ) 4 h           |

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name                         | ACGIH | IARC     | NTP   | OSHA |
|---------------------------------------|-------|----------|-------|------|
| ETHANOL<br>64-17-5                    | A3    | Group 1  | Known | X    |
| CRYSTALLINE SILICA<br>14808-60-7      | A2    | Group 1  | Known | X    |
| TITANIUM DIOXIDE<br>13463-67-7        | -     | Group 2B | -     | X    |
| CARBON BLACK<br>1333-86-4             | A3    | Group 2B | -     | X    |
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | A3    | Group 2B | -     | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Chronic toxicity**

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

**Target organ effects**

Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin, Thyroid, Lungs.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 7016 mg/kg

ATEmix (dermal) 58017 mg/kg

ATEmix (inhalation-dust/mist) 102.2 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0.042 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

| Chemical name                      | Partition coefficient |
|------------------------------------|-----------------------|
| ETHANOL<br>64-17-5                 | -0.32                 |
| 2-PROPANOL<br>67-63-0              | 0.05                  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 1.19                  |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**US EPA Waste Number**

U154 U161

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical name         | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| ETHANOL<br>64-17-5    | Toxic<br>Ignitable                |
| 2-PROPANOL<br>67-63-0 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION**

**DOT**

Proper shipping name Not regulated

**IATA**

Proper shipping name Not regulated

**IMDG**

Proper shipping name Not regulated

**15. REGULATORY INFORMATION****International Inventories**

|                      |                 |
|----------------------|-----------------|
| <b>TSCA</b>          | Complies        |
| <b>DSL/NDL</b>       | Complies        |
| <b>EINECS/ELINCS</b> | Complies        |
| <b>ENCS</b>          | Does not comply |
| <b>IECSC</b>         | Complies        |
| <b>KECL</b>          | Complies        |
| <b>PICCS</b>         | Complies        |
| <b>AICS</b>          | Complies        |

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name                     | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| 2-PROPANOL - 67-63-0              | 1.0                           |
| METHYL ISOBUTYL KETONE - 108-10-1 | 0.1                           |

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name                      | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|------------------------------------|--------------------------|----------------|--|
| METHYL ISOBUTYL KETONE<br>108-10-1 | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical name                      | California Proposition 65                                    |
|------------------------------------|--|
| ETHANOL<br>64-17-5                 | Carcinogen<br>Developmental                                  |
| CRYSTALLINE SILICA<br>14808-60-7   | *Carcinogen  |
| TITANIUM DIOXIDE<br>13463-67-7     | *Carcinogen (airborne, unbound particles of respirable size) |
| METHANOL<br>67-56-1                | Developmental  |
| CARBON BLACK<br>1333-86-4          | *Carcinogen (airborne, unbound particles of respirable size) |
| METHYL ISOBUTYL KETONE<br>108-10-1 | Carcinogen<br>Developmental                                  |

- \*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product
- Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage
- Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage

**U.S. State Right-to-Know Regulations**

| Chemical name                      | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| KAOLIN<br>1332-58-7                | X          | X             | X            |
| ETHANOL<br>64-17-5                 | X          | X             | X            |
| 2-PROPANOL<br>67-63-0              | X          | X             | X            |
| CRYSTALLINE SILICA<br>14808-60-7   | X          | X             | X            |
| TITANIUM DIOXIDE<br>13463-67-7     | X          | X             | X            |
| METHANOL<br>67-56-1                | X          | X             | X            |
| CARBON BLACK<br>1333-86-4          | X          | X             | X            |
| METHYL ISOBUTYL KETONE<br>108-10-1 | X          | X             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)  
 HMIS (Hazardous Material Information System)

Revision Date 08-Jun-2021

**Disclaimer**

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End of Safety Data Sheet



# SAFETY DATA SHEET

Revision Date 05-Oct-2020

Version 17

## 1. IDENTIFICATION

### Product identifier

**Product Name** MEDIUM STRENGTH THREADLOCKER BLUE 6 ML

### Other means of identification

**Product Code** 24200

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesive

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Skin corrosion/irritation                          | Category 2  |
| Serious eye damage/eye irritation                  | Category 2A |
| Carcinogenicity                                    | Category 1B |
| Specific target organ toxicity (repeated exposure) | Category 2  |

### Label elements

#### **Emergency Overview**

#### Signal word

**Danger**

Causes skin irritation  
Causes serious eye irritation  
May cause cancer  
May cause damage to organs through prolonged or repeated exposure



**Appearance** Blue

**Physical state** Liquid

**Odor** Mild

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                   | CAS No     | Weight-% |
|---------------------------------|------------|----------|
| DIMETHYLBENZYL<br>HYDROPEROXIDE | 80-15-9    | 1 - 5    |
| TITANIUM DIOXIDE                | 13463-67-7 | 0.1 - 1  |
| CUMENE                          | 98-82-8    | 0.1 - 1  |

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**

If symptoms persist, call a physician.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms

persist, call a physician.

|   |   |
|---|---|
| <b>Skin contact</b>                       | Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| <b>Inhalation</b>                         | Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.                       |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting.                                     |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required.  |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use, Use dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray (fog), Alcohol resistant foam

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See section 12 for additional ecological information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

**Incompatible materials** Strong oxidizing agents, Peroxides, Reducing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical Name                  | ACGIH TLV                 | OSHA PEL   | NIOSH IDLH  |
|--------------------------------|---------------------------|--|---|
| TITANIUM DIOXIDE<br>13463-67-7 | TWA: 10 mg/m <sup>3</sup> | TWA: 15 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 10 mg/m <sup>3</sup> total dust   | IDLH: 5000 mg/m <sup>3</sup><br>TWA: 2.4 mg/m <sup>3</sup> CIB 63 fine<br>TWA: 0.3 mg/m <sup>3</sup> CIB 63 ultrafine, including engineered nanoscale |
| CUMENE<br>98-82-8              | TWA: 50 ppm               | TWA: 50 ppm<br>TWA: 245 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 245 mg/m <sup>3</sup><br>(vacated) S*<br>S* | IDLH: 900 ppm<br>TWA: 50 ppm<br>TWA: 245 mg/m <sup>3</sup>  |

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Appearance     | Blue                     |
| Odor           | Mild                     |
| Odor threshold | No information available |

| Property                       | Values                   | Remarks • Method |
|--------------------------------|--------------------------|------------------|
| pH                             | No information available |                  |
| Melting point / freezing point | No information available |                  |
| Boiling point / boiling range  | > 200 °C / > 392 °F      |                  |
| Flash point                    | 131 °C / 268 °F          |                  |
| Evaporation rate               | No information available |                  |
| Flammability (solid, gas)      | No information available |                  |
| Flammability Limit in Air      |                          |                  |
| Upper flammability limit:      | No information available |                  |
| Lower flammability limit:      | No information available |                  |
| Vapor pressure                 | No information available |                  |
| Vapor density                  | No information available |                  |
| Relative density               | 1.01                     |                  |
| Water solubility               | Immiscible in water      |                  |
| Solubility(ies)                | No information available |                  |
| Partition coefficient          | No information available |                  |
| Autoignition temperature       | No information available |                  |
| Decomposition temperature      | No information available |                  |
| Kinematic viscosity            | No information available |                  |
| Dynamic viscosity              | 1,100 mPas @20°C (68°F)  |                  |
| Explosive properties           | No information available |                  |
| Oxidizing properties           | No information available |                  |

### Other Information

|  |                          |
|--|--------------------------|
| Softening point                                    | No information available |
| Molecular weight                                   | No information available |
| VOC content  | <3%                      |
| Density  | No information available |
| Bulk density                                       | No information available |
| SADT (self-accelerating decomposition temperature) | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available

### Chemical stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Strong oxidizing agents, Peroxides, Reducing agents

### Hazardous Decomposition Products

Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled. |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.                               |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis.   |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.  |

| Chemical Name                              | Oral LD50             | Dermal LD50              | Inhalation LC50        |
|--|-----------------------|--------------------------|------------------------|
| DIMETHYLBENZYL<br>HYDROPEROXIDE<br>80-15-9 | = 382 mg/kg ( Rat )   | = 0.126 mL/kg ( Rabbit ) | = 220 ppm ( Rat ) 4 h  |
| TITANIUM DIOXIDE<br>13463-67-7             | > 10000 mg/kg ( Rat ) | -                        | -                      |
| CUMENE<br>98-82-8                          | = 1400 mg/kg ( Rat )  | = 12300 µL/kg ( Rabbit ) | > 3577 ppm ( Rat ) 6 h |

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                  | ACGIH | IARC     | NTP                    | OSHA |
|--------------------------------|-------|----------|------------------------|------|
| TITANIUM DIOXIDE<br>13463-67-7 | -     | Group 2B | -                      | X    |
| CUMENE<br>98-82-8              | -     | Group 2B | Reasonably Anticipated | X    |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 18864 mg/kg

**ATEmix (dermal)** 54321 mg/kg

**ATEmix (inhalation-dust/mist)** 24.7 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0.094 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Mobility

No information available.

| Chemical Name     | Partition coefficient |
|-------------------|-----------------------|
| CUMENE<br>98-82-8 | 3.7                   |

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b> | Do not reuse container.   |
| <b>US EPA Waste Number</b>    | U055 U096 U166  |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name                           | California Hazardous Waste Status |
|---|-----------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | Toxic<br>Ignitable                |
| CUMENE<br>98-82-8                       | Toxic<br>Ignitable                |

### 14. TRANSPORT INFORMATION

**DOT**

Proper shipping name Not regulated

**IATA**

Proper shipping name Not regulated

**IMDG**

Proper shipping name Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

|               |            |
|---------------|------------|
| TSCA          | Complies   |
| DSL/NDL       | Complies   |
| EINECS/ELINCS | Complies   |
| ENCS          | Complies   |
| IECSC         | Complies   |
| KECL          | Complies   |
| PICCS         | Complies   |
| AICS          | Not Listed |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| <b>Chemical Name</b>                   | <b>SARA 313 - Threshold Values %</b> |
|--|--------------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9 | 1.0                                  |
| SACCHARIN - 81-07-2                    | 1.0                                  |
| CUMENE - 98-82-8                       | 0.1                                  |

#### **SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| <b>Chemical Name</b>                    | <b>Hazardous Substances RQs</b> | <b>CERCLA/SARA RQ</b> | <b>Reportable Quantity (RQ)</b>            |
|---|---------------------------------|-----------------------|--|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | 10 lb                           | -                     | RQ 10 lb final RQ<br>RQ 4.54 kg final RQ   |
| CUMENE<br>98-82-8                       | 5000 lb                         | -                     | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

### **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals

| <b>Chemical Name</b>           | <b>California Proposition 65</b>                             |
|--------------------------------|--|
| TITANIUM DIOXIDE<br>13463-67-7 | *Carcinogen (airborne, unbound particles of respirable size) |
| CUMENE<br>98-82-8              | Carcinogen   |

• \*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product

#### **U.S. State Right-to-Know Regulations**

| <b>Chemical Name</b>                    | <b>New Jersey</b> | <b>Massachusetts</b> | <b>Pennsylvania</b> |
|---|-------------------|----------------------|---------------------|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | X                 | X                    | X                   |
| SACCHARIN<br>81-07-2                    | X                 | X                    | X                   |
| CUMENE<br>98-82-8                       | X                 | X                    | X                   |
| 2-BUTOXYETHANOL<br>111-76-2             | X                 | X                    | X                   |
| 1,4-NAPHTHOQUINONE<br>130-15-4          | X                 | X                    | X                   |

#### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date 05-Oct-2020

**Disclaimer**

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**End of Safety Data Sheet**

Issue Date 10-Mar-2015

Revision Date 10-Mar-2015

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

**Product Name** ALPHA BAC

### Other means of identification

**Product Code** 5688

### Recommended use of the chemical and restrictions on use

**Recommended Use** Disinfectant. Food Contact Sanitizer. Laundry Sanitizer.

**Uses advised against** Use only as stated on label.

### Details of the supplier of the safety data sheet

**Supplier** Alpha Chemical Services, Inc.  
46 Morton Street  
Stoughton, MA 02072  
Phone: (800) 464-9872

### Emergency telephone number

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                   |                           |
|-----------------------------------|---------------------------|
| Acute toxicity - Oral             | Not classified            |
| Acute toxicity - Dermal           | Not classified            |
| Skin corrosion/irritation         | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1                |

### Label elements

#### **Emergency Overview**

#### **Danger**

#### **Hazard statements**

Causes severe skin burns and eye damage



**Appearance** Clear Red

**Physical state** Liquid

**Odor** Mild

### **Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Specific Treatment (See Section 4 on the SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Immediately call a POISON CENTER or doctor/physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Immediately call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name                                    | CAS No.    | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Alkyl (C12-16) dimethyl benzyl ammonium chloride | 68424-85-1 | 1-5      | *            |
| Octyl decyl dimethyl ammonium chloride           | 32426-11-2 | 1-5      | *            |
| Didecyl Dimethyl Ammonium Chloride               | 7173-51-5  | 1-5      | *            |
| Ethanol  | 64-17-5    | 1-5      | *            |
| Diocetyl dimethyl ammonium chloride              | 5538-94-3  | 1-5      | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****Skin Contact**

Wash skin with soap and water.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.  
Consult a physician

**Inhalation**

Remove to fresh air.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed****Symptoms**

No Information available.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No Information available.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name      | ACGIH TLV      | OSHA PEL   | NIOSH IDLH   |
|--------------------|----------------|--|--|
| Ethanol<br>64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup> | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup> |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face protection</b>      | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b> | Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.  |
| <b>Respiratory protection</b>   | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| <b>General Hygiene</b>          | Handle in accordance with good industrial hygiene and safety practice.  |

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                               |                          |                         |                          |
|-------------------------------|--------------------------|-------------------------|--------------------------|
| <b>Physical state</b>         | Liquid                   |                         |                          |
| <b>Appearance</b>             | Clear Red                |                         |                          |
| <b>Odor</b>                   | Mild                     | <b>Odor threshold</b>   | No Information available |
| <b>Property</b>               | <b>Values</b>            | <b>Remarks • Method</b> |                          |
| pH                            | 6.0 - 8.0                |                         |                          |
| Melting point/freezing point  | No Information available |                         |                          |
| Boiling point / boiling range | No Information available |                         |                          |
| Flash point                   | None                     |                         |                          |
| Evaporation rate              | No Information available |                         |                          |
| Flammability (solid, gas)     | No Information available |                         |                          |
| Flammability Limits in Air    |                          |                         |                          |
| Upper flammability limit:     | No Information available |                         |                          |
| Lower flammability limit:     | No Information available |                         |                          |
| Vapor pressure                | No Information available |                         |                          |
| Vapor density                 | No Information available |                         |                          |
| Specific Gravity              | 0.9656                   |                         |                          |
| Water solubility              | Complete                 |                         |                          |
| Solubility in other solvents  | No Information available |                         |                          |
| Partition coefficient         | No Information available |                         |                          |
| Autoignition temperature      | No Information available |                         |                          |
| Decomposition temperature     | No Information available |                         |                          |
| Kinematic viscosity           | No Information available |                         |                          |
| Viscosity                     | No Information available |                         |                          |
| Explosive properties          | No Information available |                         |                          |
| Oxidizing properties          | No Information available |                         |                          |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                            |                    |
|----------------------------|--------------------|
| <b>Product Information</b> | No data available  |
| <b>Inhalation</b>          | No data available. |
| <b>Eye contact</b>         | No data available. |
| <b>Skin Contact</b>        | No data available. |
| <b>Ingestion</b>           | No data available. |

| Chemical Name      | Oral LD50            | Dermal LD50 | Inhalation LC50          |
|--------------------|----------------------|-------------|--------------------------|
| Ethanol<br>64-17-5 | = 7060 mg/kg ( Rat ) | Yes         | = 124.7 mg/L ( Rat ) 4 h |

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No Information available.  
**Germ cell mutagenicity** No Information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

| Chemical Name      | ACGIH | IARC    | NTP   | OSHA |
|--------------------|-------|---------|-------|------|
| Ethanol<br>64-17-5 | A3    | Group 1 | Known | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No Information available.  
**STOT - single exposure** No Information available.  
**STOT - repeated exposure** No Information available.  
**Chronic toxicity** Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.  
**Target organ effects** Blood, Central nervous system, EYES, Liver, Reproductive System, Respiratory system, Skin.  
**Aspiration hazard** No Information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

8.156053% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name      | Algae/aquatic plants | Fish   | Crustacea   |
|--------------------|----------------------|--|---|
| Ethanol<br>64-17-5 | Yes                  | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h<br>Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h<br>Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |

### Persistence and degradability

No Information available.

### Bioaccumulation

No Information available.

| Chemical Name      | Partition coefficient |
|--------------------|-----------------------|
| Ethanol<br>64-17-5 | -0.32                 |

### Other adverse effects

No Information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Disposal of wastes**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Contaminated packaging**

Non-refillable container. Do not reuse this container to hold materials other than pesticides or diluted pesticides (rinsate). Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. Follow Pesticide Disposal instructions.

## 14. TRANSPORT INFORMATION

### DOT

Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDL       | Complies        |
| EINECS/ELINCS | Complies        |
| AICS          | Does not comply |

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute health hazard               | No |
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name     | California Proposition 65   |
|-------------------|-----------------------------|
| Ethanol - 64-17-5 | Carcinogen<br>Developmental |

**U.S. State Right-to-Know Regulations**

| Chemical Name      | New Jersey | Massachusetts | Pennsylvania |
|--------------------|------------|---------------|--------------|
| Ethanol<br>64-17-5 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** 10324-81-10634

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. See the product label for the FIFRA hazard information as required on the pesticide label.

**16. OTHER INFORMATION**

|             |                  |                |                    |   |
|-------------|------------------|----------------|--------------------|---|
| <b>NFPA</b> | Health hazards 2 | Flammability 1 | Instability 0      | <b>Physical and Chemical Properties</b> Yes |
| <b>HMIS</b> | Health hazards 2 | Flammability 1 | Physical hazards 0 | <b>Personal protection</b> N/A              |

**Issue Date** 10-Mar-2015

**Revision Date** 10-Mar-2015

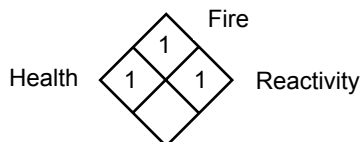
**Revision Note**

No Information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

**A-9 ALUMINUM CUTTING FLUID****NFPA****RELTON**

CORPORATION

**MATERIAL SAFETY DATA SHEET**

Meets requirements of 29 CFR 1910.1200  
(Federal Hazard Communication Standard)

**HMIS**

|            |   |
|------------|---|
| Health     | 1 |
| Fire       | 1 |
| Reactivity | 1 |

☐ **SECTION I**

|   |   |  |  |  |                |
|---|---|--|--|--|----------------|
| PRODUCT NAME OR NUMBER  | <b>A-9® ALUMINUM CUTTING FLUID</b>                            |  |  |  |                |
| MANUFACTURER'S NAME   | Relton Corporation  |  |  | EMERGENCY TELEPHONE NO<br>Chemtrec - (800) 424-9300    |                |
| ADDRESS (Number, Street, City, State, and Zip Code)                       | 317 Rolyn Place, Arcadia, CA 91007-2838                       |  |  | Non-Emergency Ph. No.<br>(323) 681-2551 (800) 423-1505 |                |
| HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME (49 CFR 172.101) | NA  |  |  | HAZARD CLASS (49 CFR 172.101)<br>NA                    |                |
| CHEMICAL FAMILY   | Mixture: predominately hydrocarbon base with bland additives. |  |  | Formula  | See Section II |

☐ **SECTION II - INGREDIENTS**

|                           | TLV | PEL | STEL | C.A.S. NO.   | %     |
|---------------------------|-----|-----|------|--------------|-------|
| Mineral Oil               | NE  | NE  | NE   | 64742-58-1   | > 70  |
| Bland Additive            | NE  | NE  | NE   | Trade secret | < 25  |
| Bland Additive            | NE  | NE  | NE   | Trade secret | < 16  |
| Perfume                   | NE  | NE  | NE   | -- --        | < 1   |
| Green dye, Pharmacy Grade | NE  | NE  | NE   | -- --        | trace |

(See Section V for Health data)

Data is based on testing mixture as a whole. Neither the mixture nor any of its ingredients is on the carcinogen or suspected-carcinogen list of the NTP, the IARC, or OSHA. Contains no Calif. Prop. 65 substance. Not reportable under SARA. All components are listed on the TSCA inventory.

☐ **SECTION III - PHYSICAL DATA**

|                              |  |                                    |                    |                 |                  |
|------------------------------|--|------------------------------------|--------------------|-----------------|------------------|
| BOILING POINT ( X°F ) ( C° ) | 400° F                                   | SPECIFIC GRAVITY ( H2O=1 ) @ 25° C | 0.883              | Freezing Point  | -20° F           |
| VAPOR PRESSURE ( mm Hg )     | 100° F: .1 mm                            | PERCENT VOLATILE BY VOLUME ( % )   | NA                 | VOC             | NA               |
| VAPOR DENSITY ( AIR=1 )      | NA                                       | EVAPORATION RATE ( WATER=1 )       | NA                 |                 |                  |
| SOLUBILITY IN WATER          | Negligible                               | pH=                                | NA                 |                 |                  |
| APPEARANCE AND ODOR          | light green oil with slight,fatty odor . |                                    | MATERIAL IS<br>GAS | LIQUID<br>PASTE | SOLID-<br>POWDER |

☐ **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

|  |            |                                   |           |           |
|--|------------|-----------------------------------|-----------|-----------|
| FLASH POINT ( method used )  | 266° F CCC | FLAMMABLE LIMITS<br>Non-Flammable | LFL<br>NA | UFL<br>NA |
| EXTINGUISHING MEDIA Use CO2, dry chemicals , foam, water as a mist only .  |            |                                   |           |           |
| SPECIAL FIRE FIGHTING PROCEDURES Prefer CO2 or sand as with oil fire.  |            |                                   |           |           |
| UNUSUAL FIRE AND EXPLOSION HAZARDS No unusual hazards  |            |                                   |           |           |
| Exposing containers to intense heat could cause drums to rupture. Cool fire-exposed containers with water spray to prevent rup ture. |            |                                   |           |           |

☐ **SECTION V - HEALTH HAZARD DATA**

|  |
|--|
| EFFECTS OF OVEREXPOSURE  |
| Eyes and skin: may cause mild irritation. Inhalation: may cause mild upper respiratory irritation. Ingestion: possible nausea.   |
| EMERGENCY AND FIRST AID PROCEDURES   |
| Eyes: flush for 15 min. with water . Skin: wash with soap and water . Inhalation: remove to fresh air . Ingestion: do not induce vomiting; give lots of water to a conscious person. Call Doctor |

NE=not established NF=not found NA=not applicable ND=not determined

**A-9 ALUMINUM CUTTING FLUID**☐ **SECTION VI - REACTIVITY DATA**

|  |                |   |  |
|--|----------------|---|--|
| STABILITY  | UNSTABLE       |   | CONDITIONS TO AVOID:<br>Flame, heat, strong oxidizing agents |
|  | STABLE         | X |  |
| INCOMPATIBILITY (materials to avoid): Swells natural rubber and some plastics. Slight etching of light metals on prolonged exposure may occur. |                |   |  |
| HAZARDOUS DECOMPOSITION PRODUCTS. CO, CO2, and acrolein when combusted   |                |   |  |
| HAZARDOUS<br>POLYMERIZATION  | MAY OCCUR      |   | CONDITIONS TO AVOID:<br>NA                                   |
|  | WILL NOT OCCUR | X |  |

☐ **SECTION VII - SPILL OR LEAK PROCEDURES**

|  |  |
|--|--|
| STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.<br>Wear respirator and protective clothing .Treat as oil spill. Soak up on absorbent clay or sand and remove to containers. |  |
| WASTE DISPOSAL METHOD Transport in DOT-approved container to EPA-approved treatment, storage, and disposal facility.<br>Follow local, State & Federal disposal regulations.            |  |

☐ **SECTION VIII - SPECIAL PROTECTION INFORMATION**

|   |   |   |
|---|---|---|
| RESPIRATORY PROTECTION (specify type) Normally not needed. For oil-type mist, use NIOSH listed respirator . |   |   |
| VENTILATION<br>Local-mechanical<br>to remove oil mist   | LOCAL EXHAUST (Specify Rate)<br>Adequate to avoid fumes and oil mists | SPECIAL Not required normally                       |
|   | MECHANICAL (General) (Specify Rate) NA                                | OTHER   |
| PROTECTIVE GLOVES Nitrile-type, oil resistant   |   | EYE PROTECTION Chemical goggles or full faceshield. |
| OTHER PROTECTIVE EQUIPMENT Clean clothes. Apron or chemical suit where splashing may occur .                |   |   |

☐ **SECTION IX - SPECIAL PRECAUTIONS**

|   |  |
|---|--|
| PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING<br>Avoid production of oil mist. Avoid excessive heat. Avoid repeated or prolonged skin or eye contact.             |  |
| OTHER PRECAUTIONS<br>While there is no TLV established for this product, airborne mist should be kept below the nuisance TLV for oil mist: 5Mg/meter <sup>3</sup> . |  |

**ADDITIONAL INFORMATION**

**DOT:** No hazardous substance      UN or NA#: Not applicable  
 No hazard class      Freight Classification: Petroleum oil, lubricating  
 No DOT ID#      It# 155250 Class 65

**SARA:** Not considered to be subject to Title III

**TSCA:** All components required to be listed on the inventory are listed.

**IARC-NTP-OSHA:** Neither the mixture nor any component is listed as a carcinogen or suspected carcinogen.

**California Prop. 65 Material:** None.

**RELTON**

CORPORATION



317 ROLYN PLACE ARCADIA CALIFORNIA 91007-2838

Phone: (323) 681-2551 (800) 423-1505

Emerg: Chemtrec - (800) 424-9300

Prepared: 12-10-93      Updated: 10-23-97  
 Updated: 12-6-94      Updated: 02-29-00  
 Updated: 5-7-96      Updated: 03/10/03

by Dr. Robert E. Pratt,  
consulting chemist

Updated: 07/22/05

Updated: 06/10/10

Updated: 01/10/11

# Safety Data Sheet



## 1. Identification

|                             |  |                         |  |
|-----------------------------|--|-------------------------|--|
| <b>Product Name:</b>        | STRUST SSPR 6PK LEAK SEAL CLEAR  | <b>Revision Date:</b>   | 2/7/2019   |
| <b>Product Identifier:</b>  | 265495   | <b>Supersedes Date:</b> | 1/3/2019   |
| <b>Recommended Use:</b>     | Leak Sealer/Aerosols   |                         |  |
| <b>Supplier:</b>            | Rust-Oleum Corporation<br>11 Hawthorn Parkway<br>Vernon Hills, IL 60061<br>USA | <b>Manufacturer:</b>    | Rust-Oleum Corporation<br>11 Hawthorn Parkway<br>Vernon Hills, IL 60061<br>USA |
| <b>Preparer:</b>            | Regulatory Department  |                         |  |
| <b>Emergency Telephone:</b> | 24 Hour Hotline: 847-367-7700  |                         |  |

## 2. Hazard Identification

### Classification

### Symbol(s) of Product



### Signal Word

Danger

### Possible Hazards

11% of the mixture consists of ingredient(s) of unknown acute toxicity.

### GHS HAZARD STATEMENTS

|  |      |  |
|--|------|--|
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled.  |
| Carcinogenicity, category 2            | H351 | Suspected of causing cancer.                                       |
| Compressed Gas                         | H280 | Contains gas under pressure; may explode if heated.                |
| Eye Irritation, category 2             | H319 | Causes serious eye irritation.                                     |
| Flammable Aerosol, category 1          | H222 | Extremely flammable aerosol.                                       |
| Reproductive Toxicity, category 1B     | H360 | May damage fertility or the unborn child.                          |
| STOT, repeated exposure, category 2    | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Skin Irritation, category 2            | H315 | Causes skin irritation.  |

### GHS LABEL PRECAUTIONARY STATEMENTS

|      |  |
|------|--|
| P201 | Obtain special instructions before use.  |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source.  |
| P251 | Do not pierce or burn, even after use.   |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray.  |
| P264 | Wash hands thoroughly after handling.  |

|                |  |
|----------------|--|
| P271           | Use only outdoors or in a well-ventilated area.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313      | IF exposed or concerned: Get medical advice/attention.   |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P321           | For specific treatment see label   |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P362+P364      | Take off contaminated clothing and wash it before reuse.   |
| P405           | Store locked up.   |
| P410+P403      | Protect from sunlight. Store in a well-ventilated place.   |
| P410+P412      | Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.   |
| P501           | Dispose of contents/container in accordance with local, regional and national regulations.                                       |

### 3. Composition / Information On Ingredients

#### HAZARDOUS SUBSTANCES

| <u>Chemical Name</u>                             | <u>CAS-No.</u> | <u>Wt.%<br/>Range</u> | <u>GHS Symbols</u>    | <u>GHS Statements</u>        |
|--|----------------|-----------------------|-----------------------|------------------------------|
| Naphtha, Petroleum, Hydrotreated Light           | 64742-49-0     | 25-50                 | GHS08                 | H304                         |
| Propane  | 74-98-6        | 10-25                 | GHS04                 | H280                         |
| n-Butane   | 106-97-8       | 2.5-10                | GHS04                 | H280                         |
| Xylenes (o-, m-, p- isomers)                     | 1330-20-7      | 2.5-10                | GHS02-GHS07           | H226-315-319-332             |
| Ethyl Acetate                                    | 141-78-6       | 2.5-10                | GHS02-GHS07           | H225-319-332-336             |
| Methyl Acetate                                   | 79-20-9        | 2.5-10                | GHS02-GHS07           | H225-319-336                 |
| Ethylbenzene                                     | 100-41-4       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-332-351-373         |
| n-Heptane  | 142-82-5       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-315-336             |
| Octane   | 111-65-9       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-315-336             |
| bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 41556-26-7     | 0.1-1.0               | GHS07                 | H317                         |
| N-Methyl 2-Pyrrolidone                           | 872-50-4       | 0.1-1.0               | GHS07-GHS08           | H315-319-332-335-360         |
| Methanol   | 67-56-1        | 0.1-1.0               | GHS02-GHS06-<br>GHS08 | H225-331-370                 |
| Toluene  | 108-88-3       | 0.1-1.0               | GHS02-GHS07-<br>GHS08 | H225-304-315-332-336-361-373 |

### 4. First-Aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

## 5. Fire-Fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**Special Fire and Explosion Hazard (Combustible Dust):** No Information

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

| Chemical Name                                    | CAS-No.    | Weight %<br>Less Than | ACGIH TLV-<br>TWA | ACGIH TLV-<br>STEL | OSHA PEL-TWA | OSHA PEL-<br>CEILING |
|--|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Naphtha, Petroleum, Hydrotreated Light           | 64742-49-0 | 30.0                  | N.E.              | N.E.               | N.E.         | N.E.                 |
| Propane  | 74-98-6    | 20.0                  | N.E.              | N.E.               | 1000 ppm     | N.E.                 |
| n-Butane   | 106-97-8   | 10.0                  | N.E.              | 1000 ppm           | N.E.         | N.E.                 |
| Xylenes (o-, m-, p- isomers)                     | 1330-20-7  | 10.0                  | 100 ppm           | 150 ppm            | 100 ppm      | N.E.                 |
| Ethyl Acetate                                    | 141-78-6   | 10.0                  | 400 ppm           | N.E.               | 400 ppm      | N.E.                 |
| Methyl Acetate                                   | 79-20-9    | 10.0                  | 200 ppm           | 250 ppm            | 200 ppm      | N.E.                 |
| Ethylbenzene                                     | 100-41-4   | 5.0                   | 20 ppm            | N.E.               | 100 ppm      | N.E.                 |
| Octane   | 111-65-9   | 5.0                   | 300 ppm           | N.E.               | 500 ppm      | N.E.                 |
| n-Heptane  | 142-82-5   | 5.0                   | 400 ppm           | 500 ppm            | 500 ppm      | N.E.                 |
| bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 41556-26-7 | 1.0                   | N.E.              | N.E.               | N.E.         | N.E.                 |
| N-Methyl 2-Pyrrolidone                           | 872-50-4   | 1.0                   | N.E.              | N.E.               | N.E.         | N.E.                 |
| Methanol   | 67-56-1    | 1.0                   | 200 ppm           | 250 ppm            | 200 ppm      | N.E.                 |
| Toluene  | 108-88-3   | 1.0                   | 20 ppm            | N.E.               | 200 ppm      | 300 ppm              |

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

|                                 |                     |  |            |
|---------------------------------|---------------------|--|------------|
| <b>Appearance:</b>              | Aerosolized Mist    | <b>Physical State:</b>                         | Liquid     |
| <b>Odor:</b>                    | Solvent Like        | <b>Odor Threshold:</b>                         | N.E.       |
| <b>Relative Density:</b>        | 0.731               | <b>pH:</b>                                     | N.A.       |
| <b>Freeze Point, °C:</b>        | N.D.                | <b>Viscosity:</b>                              | N.D.       |
| <b>Solubility in Water:</b>     | Negligible          | <b>Partition Coefficient, n-octanol/water:</b> | N.D.       |
| <b>Decomposition Temp., °C:</b> | N.D.                | <b>Explosive Limits, vol%:</b>                 | 0.9 - 16.0 |
| <b>Boiling Range, °C:</b>       | -37 - 2,230         | <b>Flash Point, °C:</b>                        | -96        |
| <b>Flammability:</b>            | Supports Combustion | <b>Auto-ignition Temp., °C:</b>                | N.D.       |
| <b>Evaporation Rate:</b>        | Faster than Ether   | <b>Vapor Pressure:</b>                         | N.D.       |
| <b>Vapor Density:</b>           | Heavier than Air    |  |            |

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** May be absorbed through the skin in harmful amounts. May cause skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed. Poison, may be fatal or cause blindness if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B).

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

#### ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u>                             | <u>Oral LD50</u> | <u>Dermal LD50</u>  | <u>Vapor LC50</u> |
|----------------|--|------------------|---------------------|-------------------|
| 64742-49-0     | Naphtha, Petroleum, Hydrotreated Light           | >5000 mg/kg Rat  | >3160 mg/kg Rabbit  | >4951 mg/L Rat    |
| 106-97-8       | n-Butane   | N.E.             | N.E.                | 658 mg/L Rat      |
| 1330-20-7      | Xylenes (o-, m-, p- isomers)                     | 3500 mg/kg Rat   | >4350 mg/kg Rabbit  | 29.08 mg/L Rat    |
| 141-78-6       | Ethyl Acetate                                    | 5620 mg/kg Rat   | >18000 mg/kg Rabbit | N.E.              |
| 79-20-9        | Methyl Acetate                                   | >5000 mg/kg Rat  | >5000 mg/kg Rabbit  | >49 mg/L Rat      |
| 100-41-4       | Ethylbenzene                                     | 3500 mg/kg Rat   | 15400 mg/kg Rabbit  | 17.4 mg/L Rat     |
| 142-82-5       | n-Heptane  | N.E.             | 3000 mg/kg Rabbit   | 103 mg/L Rat      |
| 111-65-9       | Octane   | N.E.             | N.E.                | >23.36 mg/L Rat   |
| 41556-26-7     | bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 2615 mg/kg Rat   | N.E.                | N.E.              |
| 872-50-4       | N-Methyl 2-Pyrrolidone                           | 3914 mg/kg Rat   | 8000 mg/kg Rabbit   | 20 mg/L Rat       |
| 67-56-1        | Methanol   | 6200 mg/kg Rat   | 15840 mg/kg Rabbit  | N.E.              |
| 108-88-3       | Toluene  | 2600 mg/kg Rat   | 12000 mg/kg Rabbit  | 12.5 mg/L Rat     |

N.E. - Not Established

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Do not incinerate closed containers. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

## 14. Transport Information

|                              | <u>Domestic (USDOT)</u>                     | <u>International (IMDG)</u> | <u>Air (IATA)</u>   | <u>TDG (Canada)</u> |
|------------------------------|---|-----------------------------|---------------------|---------------------|
| <b>UN Number:</b>            | N.A.  | 1950                        | 1950                | N.A.                |
| <b>Proper Shipping Name:</b> | Paint and Related Spray Products in Ltd Qty | Aerosols                    | Aerosols, flammable | Aerosols            |
| <b>Hazard Class:</b>         | N.A.  | 2                           | 2.1                 | N.A.                |
| <b>Packing Group:</b>        | N.A.  | N.A.                        | N.A.                | N.A.                |
| <b>Limited Quantity:</b>     | Yes   | Yes                         | Yes                 | Yes                 |

## 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Acute Toxicity (any route of exposure), Reproductive toxicity, Skin Corrosion or Irritation, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
|----------------------|----------------|

|                              |           |
|------------------------------|-----------|
| Xylenes (o-, m-, p- isomers) | 1330-20-7 |
| Ethylbenzene                 | 100-41-4  |
| N-Methyl 2-Pyrrolidone       | 872-50-4  |
| Methanol                     | 67-56-1   |
| Toluene                      | 108-88-3  |

**Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

**U.S. State Regulations:****California Proposition 65:**

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other Information****HMIS RATINGS**

Health: 2\*      Flammability: 4      Physical Hazard: 0      Personal Protection: X

**NFPA RATINGS**

Health: 2      Flammability: 4      Instability: 0

Maximum Incremental Reactivity 1.44

SDS REVISION DATE: 2/7/2019

REASON FOR REVISION: Substance and/or Product Properties Changed in Section(s):  
02 - Hazard Identification  
03 - Composition/Information on Ingredients  
11 - Toxicological Information  
15 - Regulatory Information  
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

# SAFETY DATA SHEET



Techspray E-LINE BLUE SHOWER Maintenance Cleaner

## Section 1. Identification

**GHS product identifier** : Techspray E-LINE BLUE SHOWER Maintenance Cleaner  
**Product code** : 1620-10S  
**Other means of identification** : Degreasers  
**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

**Supplier's details** : Techspray  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
Tel: 678-819-1408  
Toll free: 800-858-4043  
Fax: 806-372-8750

**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300  
CANUTEC (Canadian Transportation): (613) 996-6666  
Emergency phone: (800) 858-4043  
24/

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
GASES UNDER PRESSURE Compressed gas  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
Causes serious eye irritation.  
Contains gas under pressure; may explode if heated.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

**Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Degreasers

| Ingredient name   | %         | CAS number |
|-------------------|-----------|------------|
| ethanol           | ≥10 - ≤25 | 64-17-5    |
| Isopropyl alcohol | ≥10 - ≤25 | 67-63-0    |
| methanol          | ≤3        | 67-56-1    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
carbonyl halides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### [Control parameters](#)

#### [Occupational exposure limits](#)

| Ingredient name   | Exposure limits   |
|-------------------|---|
| ethanol           | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 1000 ppm 15 minutes.<br><b>NIOSH REL (United States, 10/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 10 hours.<br>TWA: 1000 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.  |
| Isopropyl alcohol | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 400 ppm 15 minutes.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 10 hours.<br>TWA: 400 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.  |
| methanol          | <b>ACGIH TLV (United States, 3/2015).</b><br><b>Absorbed through skin.</b><br>STEL: 328 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 262 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 10 hours.<br>TWA: 200 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours. |

### [Appropriate engineering controls](#)

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

|  |  |
|--|--|
| <b>Environmental exposure controls</b> | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.   |
| <b>Individual protection measures</b>  |  |
| <b>Hygiene measures</b>                | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.  |
| <b>Eye/face protection</b>             | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.   |
| <b>Skin protection</b>                 |  |
| <b>Hand protection</b>                 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>                 | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.  |
| <b>Other skin protection</b>           | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b>          | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |

## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Appearance</b>                                   |  |
| <b>Physical state</b>                               | : Liquid.  |
| <b>Color</b>  | : Clear. Colorless.  |
| <b>Odor</b>   | : Characteristic.  |
| <b>Odor threshold</b>                               | : Not available.   |
| <b>pH</b>   | : Not applicable.  |
| <b>Melting point</b>                                | : Not available.   |
| <b>Boiling point</b>                                | : Not available.   |
| <b>Flash point</b>                                  | : Not available.   |
| <b>Evaporation rate</b>                             | : >1 ((TCE=1) = 1)   |
| <b>Flammability (solid, gas)</b>                    | : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 1.1%<br>Upper: 6.7%   |
| <b>Vapor pressure</b>                               | : 7.4 kPa (55.5 mm Hg) [room temperature]  |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : Not available.   |
| <b>Solubility</b>                                   | : Not available.   |

## Section 9. Physical and chemical properties

|   |                  |
|---|------------------|
| <b>Solubility in water</b>                    | : Not available. |
| <b>Partition coefficient: n-octanol/water</b> | : Not available. |
| <b>Auto-ignition temperature</b>              | : Not available. |
| <b>Decomposition temperature</b>              | : Not available. |
| <b>Viscosity</b>                              | : Not available. |
| <b>Flow time (ISO 2431)</b>                   | : Not available. |

### Aerosol product

|                           |              |
|---------------------------|--------------|
| <b>Type of aerosol</b>    | : Spray      |
| <b>Heat of combustion</b> | : 30.26 kJ/g |

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result                | Species | Dose                     | Exposure |
|-------------------------|-----------------------|---------|--------------------------|----------|
| ethanol                 | LC50 Inhalation Vapor | Rat     | 124700 mg/m <sup>3</sup> | 4 hours  |
|                         | LD50 Oral             | Rat     | 7 g/kg                   | -        |
| Isopropyl alcohol       | LD50 Dermal           | Rabbit  | 12800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5000 mg/kg               | -        |
| methanol                | LC50 Inhalation Gas.  | Rat     | 145000 ppm               | 1 hours  |
|                         | LC50 Inhalation Gas.  | Rat     | 64000 ppm                | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 15800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5600 mg/kg               | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                           | Observation |
|-------------------------|--------------------------|---------|-------|------------------------------------|-------------|
| ethanol                 | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams            | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 0.066666667 minutes 100 milligrams | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 100 microliters                    | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 500 milligrams                     | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 400 milligrams                     | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 milligrams             | -           |
| Isopropyl alcohol       | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100                       | -           |

## Section 11. Toxicological information

|          |                          |        |   |               |   |
|----------|--------------------------|--------|---|---------------|---|
| methanol | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          | Eyes - Severe irritant   | Rabbit | - | 10 milligrams | - |
|          |                          |        |   | 100           | - |
|          | Skin - Mild irritant     | Rabbit | - | milligrams    | - |
|          |                          |        |   | 500           | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 24 hours 100  | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 40 milligrams | - |
|          | Skin - Moderate irritant | Rabbit | - | 24 hours 20   | - |
|          |                          |        |   | milligrams    | - |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA  | IARC | NTP |
|-------------------------|-------|------|-----|
| ethanol                 | -     | 1    | -   |
| Isopropyl alcohol       | -     | 3    | -   |
| methanol                | None. | -    | -   |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

## Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 39113.6 mg/kg |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name              | Result  | Species                                    | Exposure |
|--------------------------------------|---|--|----------|
| ethanol                              | Acute EC50 17.921 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                                      | Acute EC50 2000 µg/l Fresh water                | Daphnia - Daphnia magna                    | 48 hours |
|                                      | Acute LC50 25500 µg/l Marine water              | Crustaceans - Artemia franciscana - Larvae | 48 hours |
|                                      | Acute LC50 42000 µg/l Fresh water               | Fish - Oncorhynchus mykiss                 | 4 days   |
|                                      | Chronic NOEC 4.995 mg/l Marine water            | Algae - Ulva pertusa                       | 96 hours |
|                                      | Chronic NOEC 100 µl/L Fresh water               | Daphnia - Daphnia magna - Neonate          | 21 days  |
|                                      | Chronic NOEC 0.375 µl/L Fresh water             | Fish - Gambusia holbrooki - Larvae         | 12 weeks |
|                                      | Isopropyl alcohol                               | Crustaceans - Crangon crangon              | 48 hours |
|                                      | Acute LC50 1400000 to 1950000 µg/l Marine water | Fish - Rasbora heteromorpha                | 96 hours |
| methanol                             | Acute LC50 4200 mg/l Fresh water                | Algae - Ulva pertusa                       | 96 hours |
|                                      | Acute EC50 16.912 mg/l Marine water             | Crustaceans - Crangon crangon -            | 48 hours |
| Acute LC50 2500000 µg/l Marine water |   |  |          |

## Section 12. Ecological information

|  |  |  |          |
|--|--|--|----------|
|  | Acute LC50 3289 to 4395 mg/l Fresh water | Adult<br>Daphnia - Daphnia magna - Neonate | 48 hours |
|  | Acute LC50 290 mg/l Fresh water          | Fish - Danio rerio - Egg                   | 96 hours |
|  | Chronic NOEC 9.96 mg/l Marine water      | Algae - Ulva pertusa                       | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethanol                 | -0.35              | -   | low       |
| Isopropyl alcohol       | 0.05               | -   | low       |
| methanol                | -0.77              | <10 | low       |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.





### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                       | CAS #   | Status | Reference number |
|----------------------------------|---------|--------|------------------|
| Methanol (I); Methyl alcohol (I) | 67-56-1 | Listed | U154             |

## Section 14. Transport information

|                         | DOT Classification          | TDG Classification          | Mexico Classification       | ADR/RID                | IMDG   | IATA  |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|--|---|
| UN number               | -                           | -                           | -                           | UN1950                 | UN1950   | ID8000  |
| UN proper shipping name | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Aerosols,<br>flammable | AEROSOLS IN LIMITED QUANTITIES OF CLASS 2 (heptane, 1, 1-difluoroethane) | Consumer commodity<br>ORM-D<br>ID8000 (ethanol) |
|                         |                             |                             |                             |                        |  |   |

## Section 14. Transport information

|                                   |   |   |       |  |  |  |
|-----------------------------------|---|---|-------|--|--|--|
| <b>Transport hazard class(es)</b> | ORM-D   | ORM-D   | ORM-D | 2<br><br>                                | 2.1<br> | 9<br>                 |
| <b>Packing group</b>              | -   | -   | -     | II   | II   | -  |
| <b>Environmental hazards</b>      | Yes.  | No.   | No.   | Yes.   | No.  | No.  |
| <b>Additional information</b>     | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). | -     | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><br><b><u>Hazard identification number</u></b><br>UN1950<br><br><b><u>Tunnel code</u></b><br>(D) | -  | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** heptane  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Air Act (CAA) 112 regulated flammable substances:** 1,1-difluoroethane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Sudden release of pressure  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

| Name              | %         | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------|-----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| ethanol           | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | Yes.                            |
| Isopropyl alcohol | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | No.                             |
| methanol          | ≤3        | Yes.        | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|  | Product name      | CAS number | %         |
|--|-------------------|------------|-----------|
| <b>Form R - Reporting requirements</b> | Isopropyl alcohol | 67-63-0    | ≥10 - ≤25 |
|  | methanol          | 67-56-1    | ≤3        |
| <b>Supplier notification</b>           | Isopropyl alcohol | 67-63-0    | ≥10 - ≤25 |
|  | methanol          | 67-56-1    | ≤3        |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: HEPTANE; N-HEPTANE; DIFLUOROETHANE; ETHYL ALCOHOL; DENATURED ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHANOL; METHYL ALCOHOL
- New York** : The following components are listed: Methanol
- New Jersey** : The following components are listed: n-HEPTANE; HEPTANE; 1,1-DIFLUOROETHANE; ETHANE, 1,1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHYL ALCOHOL; METHANOL
- Pennsylvania** : The following components are listed: HEPTANE; DENATURED ALCOHOL; ETHANOL; ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS); METHANOL

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level                       |
|-----------------|--------|--------------|---------------------------|---|
| ethanol         | No.    | No.          | Yes.                      | No.   |
| methanol        | No.    | Yes.         | No.                       | 23000 µg/day (ingestion)<br>47000 µg/day (inhalation) |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

|                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Europe</b>            | : All components are listed or exempted.  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS):</b> All components are listed or exempted.<br><b>Japan inventory (ISHL):</b> Not determined. |
| <b>Malaysia</b>          | : Not determined.   |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : All components are listed or exempted.  |
| <b>Turkey</b>            | : All components are listed or exempted.  |

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |
|                  |   |   |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

## Section 16. Other information

| Classification  | Justification  |
|---|--|
| FLAMMABLE AEROSOLS - Category 1<br>GASES UNDER PRESSURE - Compressed gas<br>SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 1A | On basis of test data<br>On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method |

### History

**Date of printing** : 8/15/2019

**Date of issue/Date of revision** : 8/15/2019

**Date of previous issue** : 8/15/2019

**Version** : 2

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Prepared according to Global Harmonized System (GHS) standards

## SECTION 1

## CHEMICAL PRODUCT IDENTIFICATION

Lubrication Technologies, Inc.  
900 Mendelssohn Avenue North  
Golden Valley, MN 55427-4309  
Tel: 763-545-0707

Product Trade Name: **Viking Drill Ultra S/P™ Super Premium**

CAS Number: Mixture

Synonyms/Other: Norseman Drill Ultra S/P™ Super Premium

Part Number(s): N/A

Recommended Use: Metal working fluid

Restrictions on Use: Not determined

Created Date: 9/16/2015

Preparation/Revision Date: 9/28/2015

Emergency Phone Number: 1-800-424-9300 (CHEMTREC)

SDS CODE: 10376

## SECTION 2

## HAZARD IDENTIFICATION

Appearance: Yellow Liquid

Odor: Mild Petroleum

Classification: This material is not considered to be hazardous according to the Globally Harmonized System of Classification and Labelling Chemicals (GHS), Third Revised Edition.

Target Organs: Not applicable.

Pictogram(s):

Signal Word: None required.

Hazard Statement: None required.

Other Hazards: Not determined.

Prevention: None required.

Response: None required.

Storage Procedures: None required.

Disposal: None required.

Other: See section 11 for complete health hazard information.

## SECTION 3

## COMPOSITION OF INGREDIENTS

| Component               | CAS Number | Percentage (by weight) |
|-------------------------|------------|------------------------|
| Alkanes, C20-28, Chloro | 63449-39-8 | 90-100%                |

The balance of components do not contribute to the overall classification of the fluid, according to the GHS Standard.

## SECTION 4

## FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Eye Contact:</b>  | If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention. |
| <b>Skin Contact:</b> | Call a doctor if you feel unwell.  |
| <b>Inhalation:</b>   | Get medical advice or attention if you feel unwell or are concerned.   |
| <b>Ingestion:</b>    | If you feel unwell or concerned: Get medical advice/attention. Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.            |
| <b>Other:</b>        | No additional information  |

## SECTION 5

## FIRE FIGHTING MEASURES

|  |   |
|--|---|
| <b>Flash Point:</b>                          | 200°C by Cleveland Open Cup Tester.   |
| <b>Flammable limits:</b>                     | Not determined.   |
| <b>Extinguishing media:</b>                  | Use dry chemical, alcohol foam, all purpose AFFF or carbon dioxide to extinguish fire.  |
| <b>Special firefighting procedures:</b>      | DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). |
| <b>Unusual fire &amp; explosion hazards:</b> | Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.  |
| <b>Byproducts of combustion:</b>             | Fires involving this product may release oxides of carbon, phosphorus, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.  |
| <b>Autoignition temperature:</b>             | Not determined.   |
| <b>Explosion data:</b>                       | Not determined. Care should always be exercised in dust/mist areas.   |
| <b>Other:</b>                                | Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.  |

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Spill control procedures (land):</b>  | Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300). |
| <b>Spill control procedures (water):</b> | Try to contain large spills with floating booms to prevent spill from spreading. Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities (normally the National Response Center or Coast Guard at 800-424-8802).   |
| <b>Waste disposal method:</b>            | Do not empty into drains. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.  |
| <b>Other:</b>                            | CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.  |

## SECTION 7

## HANDLING AND STORAGE

|                                |   |
|--------------------------------|---|
| <b>Handling procedures:</b>    | Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.<br>Handling temperatures should not exceed 60°C (140°F) to minimize danger of burns. Open containers carefully in a well ventilated area or use appropriate respiratory protection. Wash thoroughly after handling. |
| <b>Storage procedures:</b>     | Store containers away from heat, sparks, open flame, or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.   |
| <b>Additional information:</b> | No additional information.  |

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product:

|                         | OSHA TWA | OSHA STEL | ACGIH TWA |
|-------------------------|----------|-----------|-----------|
| Alkanes, C20-28, Chloro | n/a      | n/a       | n/a       |

TWA – Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.

STEL – Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

All base oils, including additive carriers, contain <3.0% DMSO extractable material.

|                                |  |
|--------------------------------|--|
| <b>Personal protection:</b>    | Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.  |
| <b>Respiratory protection:</b> | None required if ventilation is adequate. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.   |
| <b>Eye protection:</b>         | Eye protection is strongly recommended. Wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).  |
| <b>Hand protection:</b>        | Impervious, chemically resistant gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.   |
| <b>Other protection:</b>       | Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended based on level of activity and exposure. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.   |
| <b>Local control measures:</b> | Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored. |
| <b>Other:</b>                  | Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.   |

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

|                                   |   |
|-----------------------------------|---|
| <b>Appearance:</b>                | Yellow Liquid   |
| <b>Odor:</b>                      | Mild Petroleum  |
| <b>Odor threshold:</b>            | Not determined.   |
| <b>pH:</b>                        | Not applicable.   |
| <b>Melting/Freezing point:</b>    | Not determined.   |
| <b>Initial boiling point:</b>     | Not determined.   |
| <b>Boiling range:</b>             | Not determined.   |
| <b>Flash point:</b>               | 200°C.  |
| <b>Evaporation rate:</b>          | Not determined.   |
| <b>Flammability:</b>              | Not determined.   |
| <b>Upper flammable limit:</b>     | Not determined.   |
| <b>Lower flammable limit:</b>     | Not determined.   |
| <b>Vapor pressure:</b>            | Not determined.   |
| <b>Vapor density:</b>             | Not determined.   |
| <b>Relative density:</b>          | 1.1 - 1.3 g/cm <sup>3</sup> @ 25 C                        |
| <b>Solubility:</b>                | Negligible in water, miscible in most petroleum solvents. |
| <b>Partition Coefficient:</b>     | Not determined.   |
| <b>Auto-ignition temperature:</b> | Not determined.   |
| <b>Decomposition temperature:</b> | Not determined.   |
| <b>Viscosity:</b>                 | 960 cSt at 40°C.  |
| <b>Other</b>                      | Not applicable.   |

## SECTION 10

## STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Reactivity</b>                            |  |
| <b>Chemical stability:</b>                   | Material is chemically stable at room temperatures and pressure.   |
| <b>Hazardous polymerization:</b>             | Will not occur.  |
| <b>Conditions to avoid:</b>                  | Avoid high temperatures and product contamination.   |
| <b>Incompatibility with other materials:</b> | Avoid contact with acids and strong oxidizing materials.   |
| <b>Decomposition products:</b>               | Smoke, carbon monoxide, carbon dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and irritating vapors. |
| <b>Other:</b>                                | Not applicable.  |

## SECTION 11

## TOXICOLOGICAL INFORMATION

**Acute toxicity (LD50) \*See note at the bottom of the section**

|                                   |  |
|-----------------------------------|--|
| <b>Oral:</b>                      | >5000 mg/kg                                |
| <b>Dermal:</b>                    | >5000 mg/kg                                |
| <b>Inhalation:</b>                | >20.0 mg/l                                 |
| <b>Skin irritation:</b>           | Non-irritant                               |
| <b>Eye irritation:</b>            | Non-irritant                               |
| <b>Dermal sensitization:</b>      | Not expected to have a sensitizing effect. |
| <b>Respiratory sensitization:</b> | Not expected to have a sensitizing effect. |
| <b>Aspiration Hazard:</b>         | Not applicable                             |

#### Chronic Toxicity

|                                |   |
|--------------------------------|---|
| <b>Mutagenicity:</b>           | Not suspected of causing genetic defects  |
| <b>Carcinogenicity:</b>        | Not suspected of causing cancer.  |
| <b>Reproductive toxicity:</b>  | Not expected to have adverse effects on reproduction.   |
| <b>STOT-single exposure:</b>   | Not expected to have adverse effects.   |
| <b>STOT-repeated exposure:</b> | Not expected to have long term adverse effects.   |
| <b>Other:</b>                  | *All data in this section is based off calculations from Part 3 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components. |

## SECTION 12

## ECOLOGICAL INFORMATION

#### Environmental toxicity

|                                   |   |
|-----------------------------------|---|
| <b>Fish:</b>                      | > 100 mg/l.   |
| <b>Invertebrates:</b>             | > 100 mg/l.   |
| <b>Aquatic plants:</b>            | > 100 mg/l.   |
| <b>Microorganism:</b>             | > 100 mg/l.   |
| <b>Persistence/Degradability:</b> | This product is not expected to be readily biodegradable.   |
| <b>Bioaccumulation:</b>           | Not determined.   |
| <b>Mobility in soil:</b>          | Not determined.   |
| <b>Other:</b>                     | All classifications are based on calculations in Part 4 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components. |

## SECTION 13

## DISPOSAL CONSIDERATIONS

|                        |  |
|------------------------|--|
| <b>Waste disposal:</b> | This product unadulterated by other materials can be classified as a non-hazardous waste. Depending on use, used product may be regulated. Dispose of in a licensed facility. Do not discharge product in to sewer system. Dispose of containers by crushing or puncturing, so as to prevent unauthorized use of used containers. Waste management should be in full compliance with federal, state, and local laws. |
| <b>Other</b>           | The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.   |

## SECTION 14

## TRANSPORT INFORMATION

|                              |                                   |
|------------------------------|-----------------------------------|
| <b>Land Transport (DOT):</b> | Not regulated for land transport. |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Land Transport (TDG):</b> | Not regulated for land transport. |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Sea Transport (IMDG):</b> | Not regulated for sea transport.  |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Air Transport (IATA):</b> | Not regulated for air transport.  |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Other:</b>                | Not applicable.                   |

## SECTION 15

## REGULATORY INFORMATION

### Federal Regulation

#### **Clean water act/oil:**

Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spill or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

#### **TSCA:**

All components of this material are listed in the U.S. TSCA Inventory.

#### **Other TSCA:**

Not applicable.

#### **SARA title III:**

Section 302/304 extremely hazardous substances:

None.

Section 311, 312 hazard categorization:

|                                    |    |
|------------------------------------|----|
| Acute (immediate health effects):  | NO |
| Chronic (delayed health effects):  | NO |
| Fire (hazard):                     | NO |
| Reactivity (hazard):               | NO |
| Pressure ( sudden release hazard): | NO |

Section 313 toxic chemicals:

No components present are at or greater than the de minimis (minimum reportable) concentration requirements for reporting.

#### **CERCLA:**

For stationary/moving sources – reportable quantity (due to): Not hazardous due to the petroleum exclusion.

### State Regulations

#### **Right-to-know**

Not determined.

#### **Other:**

A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

## SECTION 16

## OTHER INFORMATION

|                   | NFPA 704 | NPCA-HMIS | KEY          |
|-------------------|----------|-----------|--------------|
| HEALTH:           | 0        | 0         | 0 = Minimal  |
| FIRE:             | 0        | 0         | 1 = Slight   |
| REACTIVITY:       | 0        | 0         | 2 = Moderate |
| SPECIFIC HAZARD:  | None     | N/A       | 3 = Serious  |
| PROTECTION INDEX: | N/A      | B         | 4 = Severe   |

Version: II

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Revisions / Comments: None. 09/16/2015  
Update to Product Trade Name and Synonyms/Other. 9/28/2015



## Safety Data Sheet California CARB Compliant

### 1 - Identification

**Product Name:** WD-40 Multi-Use Product Aerosol

**Product Use:** Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion

**Restrictions on Use:** None identified

**SDS Date Of Preparation:** August 2, 2021

**Manufacturer:** WD-40 Company

**Address:** 9715 Businesspark Avenue  
San Diego, California, USA  
92131

**Telephone:**

**Emergency:** 1-888-324-7596

**Information:** 1-888-324-7596

**Chemical Spills:** 1-800-424-9300 (Chemtrec)  
1-703-527-3887 (International Calls)

### 2 – Hazards Identification

**Hazcom 2012/GHS Classification:**

Flammable Aerosol Category 1

Gas Under Pressure: Compressed Gas

Aspiration Toxicity Category 1

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

**Label Elements:**



**DANGER!**

Extremely Flammable Aerosol.

Contains gas under pressure; may explode if heated.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

**Prevention**

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing vapors or mists.

Use only outdoors or in a well-ventilated area.

**Response**

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

**Storage**

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

**Disposal**

Dispose of contents and container in accordance with local and national regulations.

### 3 - Composition/Information on Ingredients

| Ingredient                | CAS #  | Weight Percent | US Hazcom 2012/ GHS Classification  |
|---------------------------|--|----------------|---|
| LVP Aliphatic Hydrocarbon | 64742-47-8   | 45-50%         | Aspiration Toxicity Category 1  |
| Petroleum Base Oil        | 64742-56-9<br>64742-65-0<br>64742-53-6<br>64742-54-7<br>64742-71-8 | <35%           | Not Hazardous   |
| Aliphatic Hydrocarbon     | 64742-47-8   | <25%           | Flammable Liquid Category 3<br>Aspiration Toxicity Category 1<br>Specific Target Organ Toxicity<br>Single Exposure Category 3<br>(nervous system effects) |
| Carbon Dioxide            | 124-38-9   | 2-3%           | Simple Asphyxiant<br>Gas Under Pressure,<br>Compressed Gas  |

Note: The specific chemical identity and exact percentages are a trade secret.

### 4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Signs and Symptoms of Exposure:** Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness and other nervous system effects. Skin contact may cause drying of the skin.

**Indication of Immediate Medical Attention/Special Treatment Needed:** Immediate medical attention is needed for ingestion.

### 5 – Fire Fighting Measures

**Suitable (and unsuitable) Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Specific Hazards Arising from the Chemical:** Extremely flammable aerosol. Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

### 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

**Methods and Materials for Containment/Cleanup:** Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

### 7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

## 8 – Exposure Controls/Personal Protection

| Chemical                  | Occupational Exposure Limits  |
|---------------------------|---|
| LVP Aliphatic Hydrocarbon | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended)   |
| Petroleum Base Oil        | 5 mg/m <sup>3</sup> TWA (Inhalable) ACGIH TLV (as Mineral oil)<br>5 mg/m <sup>3</sup> TWA OSHA PEL (as Oil mist, mineral) |
| Aliphatic Hydrocarbon     | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended)   |
| Carbon Dioxide            | 5000 ppm TWA, 30,000 ppm STEL ACGIH TLV<br>5000 ppm TWA OSHA PEL  |

### The Following Controls are Recommended for Normal Consumer Use of this Product

**Appropriate Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact. Always spray away from your face.

**Skin Protection:** Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Appropriate Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

**Personal Protection:**

**Eye Protection:** Safety goggles recommended where eye contact is possible.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

## 9 – Physical and Chemical Properties

|                            |                                      |   |                        |
|----------------------------|--------------------------------------|---|------------------------|
| Appearance:                | Light green to amber liquid          | Flammable Limits: (Solvent Portion)     | LEL: 0.6% UEL: 8%      |
| Odor:                      | Mild petroleum odor                  | Vapor Pressure:                         | 95-115 PSI @ 70°F      |
| Odor Threshold:            | Not established                      | Vapor Density:                          | Greater than 1 (air=1) |
| pH:                        | Not Applicable                       | Relative Density:                       | 0.8 – 0.82 @ 60°F      |
| Melting/Freezing Point:    | Not established                      | Solubilities:                           | Insoluble in water     |
| Boiling Point/Range:       | 361 - 369°F (183 - 187°C)            | Partition Coefficient; n-octanol/water: | Not established        |
| Flash Point:               | 138°F (59°C) Tag Closed Cup (liquid) | Autoignition Temperature:               | Not established        |
| Evaporation Rate:          | Not established                      | Decomposition Temperature:              | Not established        |
| Flammability (solid, gas): | Flammable Aerosol                    | Viscosity:                              | 2.79-2.96 cSt @ 100°F  |
| VOC:                       | 24.1%                                | Pour Point:                             | -63°C (-81.4°F) ASTM   |

|  |                  |  |      |
|--|------------------|--|------|
|  | MIR=0.43gO3/gVOC |  | D-97 |
|--|------------------|--|------|

## 10 – Stability and Reactivity

**Reactivity:** Not reactive under normal conditions

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** May react with strong oxidizers generating heat.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

## 11 – Toxicological Information

**Symptoms of Overexposure:**

**Inhalation:** High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

**Skin Contact:** Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

**Eye Contact:** Contact may be irritating to eyes. May cause redness and tearing.

**Ingestion:** This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

**Chronic Effects:** None expected.

**Carcinogen Status:** None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

**Reproductive Toxicity:** None of the components is considered a reproductive hazard.

**Numerical Measures of Toxicity:**

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

## 12 – Ecological Information

**Ecotoxicity:** No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms

**Persistence and Degradability:** Components are readily biodegradable.

**Bioaccumulative Potential:** Bioaccumulation is not expected based on an assessment of the ingredients.

**Mobility in Soil:** No data available

**Other Adverse Effects:** None known

## 13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

## 14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty

(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

## 15 – Regulatory Information

### U.S. Federal Regulations:

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

### SARA TITLE III:

**Hazard Category For Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory.

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):** This product does not require a California Proposition 65 warning.

**VOC Regulations:** This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

**Canadian Environmental Protection Act:** All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

## 16 – Other Information

### HMIS Hazard Rating:

**Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)**

Revision Date: August 2, 2021

Supersedes: March 5, 2019

Revision Summary: Section 9: Appearance

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Dept.

1012200/No.0084706

CUSTOMER: 381510  
BATCH #: 2039495  
PICK ZONE: AER2  
PRODUCT NAME: X-433, MM

ORDER #: 3711065  
DELIVERY ID: 15415987  
PICK SEQUENCE #: 22  
BARCODE #: 12061189

## Safety Data Sheet X-433, MM

Supersedes Date 10/22/2013

Issuing Date 01/12/2016

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name X-433, MM  
Recommended use Lubricant  
Information on Manufacturer  
CERTIFIED LABS, DIV. OF NCH CORP.  
BOX 152170  
IRVING, TEXAS 75015

Product Code 12061189  
Chemical nature Aerosol  
Emergency Telephone Number  
CHEMTREC® 800-424-9300  
Telephone inquiry  
972-579-2477

### 2. HAZARD IDENTIFICATION

Color Gray

Physical state liquid

Odor Solvent

#### GHS

##### Classification

##### Physical Hazards

Flammable Aerosols  
Gases under pressure

Category 2  
Compressed Gas

##### Health Hazard

Aspiration Toxicity  
Specific target organ systemic toxicity (single exposure)  
Specific target organ toxicity (repeated exposure)

Category 1  
Category 3  
Category 2

##### Other hazards

None

#### Labeling

##### Signal Word

DANGER



##### Hazard statements

H223 - Flammable aerosol  
H336 - May cause drowsiness or dizziness  
H304 - May be fatal if swallowed and enters airways  
H373 - May cause damage to organs through prolonged or repeated exposure  
H280 - Contains gas under pressure; may explode if heated

##### Precautionary Statements

P210 - Keep away from heat, sparks, open flames or hot surfaces.  
P211 - Do not spray on an open flame or other ignition source  
P251 - Pressurized container: Do not pierce or burn, even after use  
P270 - Do not eat, drink or smoke when using this product.  
P260 - Do not breathe vapors, mist or gas.  
P271 - Use in a well-ventilated area.  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a physician if unwell.  
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.  
P410 + P403 - Protect from sunlight. Store in a well-ventilated place  
P412 - Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents and container in accordance with applicable local regulations.

42 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component  | CAS No.    | Weight % * |
|--|------------|------------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)    | 64742-52-5 | 15-40      |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)    | 64742-53-6 | 15-40      |
| Petrolatum   | 8009-03-8  | 7-13       |
| Sodium sulfonate   | 68608-26-4 | 5-10       |
| Isobutane  | 75-28-5    | 5-10       |
| Propane  | 74-98-6    | 1-5        |
| Polybutene   | 9003-29-6  | 1-5        |
| Stoddard solvent   | 8052-41-3  | 1-5        |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | 64742-65-0 | 1-5        |
| Hexylene glycol  | 107-41-5   | 1-5        |
| 1,2,4- Trimethylbenzene  | 95-63-6    | 0.1-1      |

\*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

|                           |   |
|---------------------------|---|
| <b>General advice</b>     | Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, or gas.   |
| <b>Eye Contact</b>        | Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.                         |
| <b>Skin Contact</b>       | Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.  |
| <b>Inhalation</b>         | Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| <b>Ingestion</b>          | Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.  |
| <b>Notes to physician</b> | Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.                                  |

### 5. FIRE-FIGHTING MEASURES

|   |                               |
|---|-------------------------------|
| <b>Flash Point</b> 201.2 °F / 94 °C   | <b>Method</b> Seta closed cup |
| <b>Flammability Limits in Air %:</b> Mixture.   | <b>Upper:</b> 9.5             |
| <b>Suitable Extinguishing Media</b>   | <b>Lower:</b> 0.9             |
| Foam. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Water spray. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |                               |
| <b>Specific hazards arising from the chemical</b>   |                               |
| Material can create slippery conditions. Flame extension: 9.8 inches / 25 cm and Burnback: 0 inch / 0 cm.   |                               |
| <b>Protective Equipment and Precautions for Firefighters</b>  |                               |
| As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.   |                               |
| <b>Aerosol Level (NFPA 30B) -</b> 3   |                               |
| <b>NFPA</b>   | <b>Health</b> 2               |
| <b>HMIS</b>   | <b>Health</b> 2               |
|   | <b>Flammability</b> 4         |
|   | <b>Flammability</b> 4         |
|   | <b>Instability</b> 0          |
|   | <b>Instability</b> 0          |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |   |
|----------------------------------|---|
| <b>Personal Precautions</b>      | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Material can create slippery conditions.                             |
| <b>Environmental Precautions</b> | Do not flush into surface water or sanitary sewer system.   |
| <b>Methods for Containment</b>   | Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). |
| <b>Methods for Cleaning Up</b>   | Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.   |
| <b>Neutralizing Agent</b>        | Not applicable.   |

### 7. HANDLING AND STORAGE

|                            |  |              |                |                     |
|----------------------------|--|--------------|----------------|---------------------|
| <b>Handling</b>            | Ensure adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas. Wear personal protective equipment. |              |                |                     |
| <b>Storage</b>             | Store in original container. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.   |              |                |                     |
| <b>Storage Temperature</b> | <b>Minimum</b>   | 35 °F / 2 °C |                | <b>Maximum</b>      |
| <b>Storage Conditions</b>  | <b>Indoor</b>  | X            | <b>Outdoor</b> | <b>Heated</b>       |
|                            |  |              |                | <b>Refrigerated</b> |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

| Component  | ACGIH TLV   | OSHA PEL                                     | NIOSH  |
|--|---|--|--|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)    | TWA: 5 mg/m <sup>3</sup> ; STEL: 10 mg/m <sup>3</sup> | TWA: 5 mg/m <sup>3</sup>                     | No data available  |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)    | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Petrolatum   | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Isobutane  | STEL: 1000 ppm  | No data available                            | TWA: 800 ppm<br>TWA: 1900 mg/m <sup>3</sup>  |
| Propane  | TWA: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup> | 2100 ppm<br>TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup>                                 |
| Polybutene   | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Stoddard solvent   | TWA: 100 ppm  | TWA: 500 ppm<br>TWA: 2900 mg/m <sup>3</sup>  | 20000 mg/m <sup>3</sup><br>Ceiling: 1800 mg/m <sup>3</sup><br>TWA: 350 mg/m <sup>3</sup> |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>   | TWA: 5 mg/m <sup>3</sup>                     | No data available  |
| Hexylene glycol  | Ceiling: 25 ppm                                       | No data available                            | Ceiling: 25 ppm<br>Ceiling: 125 mg/m <sup>3</sup>  |
| 1,2,4- Trimethylbenzene  | TWA: 25 ppm   | No data available                            | TWA: 25 ppm<br>TWA: 125 mg/m <sup>3</sup>  |

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Personal Protective Equipment

#### Eye/Face Protection

Safety glasses with side -shields.

#### Skin Protection

Wear suitable protective clothing, Impervious gloves.

#### Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use. Wear protective gloves/clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                               |                           |                           |                   |
|-------------------------------|---------------------------|---------------------------|-------------------|
| Physical state                | liquid                    | Viscosity                 | Slight viscous    |
| Color                         | Gray                      | Odor                      | Solvent           |
| Odor Threshold                | Not applicable            | Appearance                | Opaque            |
| pH                            | Not applicable            | Specific Gravity          | 0.857             |
| Evaporation Rate              | 18.85 (Butyl acetate=1)   | Percent Volatile (Volume) | 23.7              |
| VOC Content (%)               | 17.2                      | VOC Content (g/L)         | 147.4             |
| Vapor Pressure                | 1762.54 mmHg @ 70°F       | Vapor Density             | 1.4 (Air = 1.0)   |
| Solubility                    | Negligible                | n-Octanol/Water Partition | No data available |
| Melting Point/Range           | No data available         | Decomposition Temperature | No data available |
| Boiling Point/Range           | No data available         | Flammability (solid, gas) | No data available |
| Flash Point                   | 201.2 °F / 94 °C          | Method                    | Seta closed cup   |
| Autoignition Temperature      | No information available. |                           |                   |
| Flammability Limits in Air %: | Mixture                   | Upper: 9.5 Lower: 0.9     |                   |

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable. Hazardous polymerization does not occur.

### Conditions to Avoid

Keep away from open flames, hot surfaces, and sources of ignition.

### Incompatible Products

Strong oxidizing agents, Strong acids, Aldehydes, Ketones.

### Decomposition Temperature

No data available

### Hazardous Decomposition Products

Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Aldehydes, Ketones.

### Possibility of Hazardous Reactions

None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

No information available.

The following values are calculated based on chapter 3.1 of the GHS document

|                 |                          |
|-----------------|--------------------------|
| Oral LD50       | 4,960.48                 |
| Dermal LD50     | 2,214.25                 |
| Inhalation LC50 |                          |
| Gas             | No information available |
| Mist            | No information available |
| Vapor           | No information available |

Principle Route of Exposure Inhalation, Skin contact, Eye contact, Ingestion.  
Primary Routes of Entry Inhalation, Eye contact, Skin contact, Ingestion.

#### Acute Effects:

Eyes

Low hazard for usual industrial or commercial handling.

Skin

Low hazard for usual industrial or commercial handling.

Inhalation

May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes headache, drowsiness or other effects to the central nervous system. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

#### Chronic Toxicity

Repeated or prolonged exposure may cause central nervous system damage. Kidney injury may occur.

#### Target Organ Effects

Central nervous system, Heart, Liver, Kidney, Blood, Respiratory system, Immune system.

#### Aggravated Medical Conditions

Respiratory disorders, Neurological disorders, Skin disorders, Kidney disorders, Blood disorders.

#### Component Information

##### Acute Toxicity

| Component  | Oral LD50            | Dermal LD50             | Inhalation LC50                     | Draize Test       | Other             |
|--|----------------------|-------------------------|-------------------------------------|-------------------|-------------------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)<br>64742-52-5    | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | no data available                   | no data available | no data available |
| Petrolatum<br>8009-03-8  | no data available    | = 3600 mg/kg ( Rabbit ) | no data available                   | no data available | no data available |
| Isobutane<br>75-28-5   | no data available    | no data available       | = 658 mg/L ( Rat ) 4 h              | no data available | no data available |
| Propane<br>74-98-6   | no data available    | no data available       | = 658 mg/L ( Rat ) 4 h              | no data available | no data available |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)<br>64742-65-0 | >5000 mg/kg (rat)    | >5000 mg/kg (rabbit)    | no data available                   | no data available | no data available |
| Hexylene glycol<br>107-41-5  | = 3692 mg/kg ( Rat ) | no data available       | > 310 mg/m <sup>3</sup> ( Rat ) 1 h | no data available | no data available |
| 1,2,4- Trimethylbenzene<br>95-63-6   | = 3280 mg/kg ( Rat ) | > 3160 mg/kg ( Rabbit ) | = 18 g/m <sup>3</sup> ( Rat ) 4 h   | no data available | no data available |

##### Chronic Toxicity

| Component                          | Mutagenicity      | Sensitization     | Developmental Toxicity | Reproductive Toxicity | Target Organ Effects                                       |
|------------------------------------|-------------------|-------------------|------------------------|-----------------------|--|
| Isobutane<br>75-28-5               | no data available | no data available | no data available      | no data available     | Central nervous system                                     |
| Propane<br>74-98-6                 | no data available | no data available | no data available      | no data available     | Central nervous system                                     |
| Stoddard solvent<br>8052-41-3      | no data available | no data available | no data available      | no data available     | Skin Central nervous system Eyes Respiratory system Kidney |
| Hexylene glycol<br>107-41-5        | no data available | no data available | no data available      | no data available     | Skin Central nervous system Eyes Respiratory system        |
| 1,2,4- Trimethylbenzene<br>95-63-6 | no data available | no data available | no data available      | no data available     | Blood Skin Central nervous system Eyes Respiratory system  |

#### Carcinogenicity

There are no known carcinogenic chemicals in this product.

## 12. ECOLOGICAL INFORMATION

#### Product Information

No information available.

#### Component Information

| Component   | Toxicity to Algae         | Toxicity to Fish                          | Microtox                 | Crustacea                          | log Pow |
|---|---------------------------|---|--------------------------|------------------------------------|---------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h | No information available | 1000: 48 h Daphnia magna mg/L EC50 | N/A     |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h | No information available | 1000: 48 h Daphnia magna mg/L EC50 | N/A     |

|  |                           |   |                          |   |         |
|--|---------------------------|---|--------------------------|---|---------|
| Isobutane  | No information available. | No information available.   | No information available | No information available.                 | 2.88    |
| Propane  | No information available. | No information available.   | No information available | No information available.                 | 2.3     |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h   | No information available | 1000: 48 h Daphnia magna mg/L EC50        | N/A     |
| Hexylene glycol  | No information available. | LC50 10500 - 11000 mg/L Pimephales promelas 96 h<br>LC50 = 10000 mg/L Lepomis macrochirus 96 h<br>LC50 = 8690 mg/L Pimephales promelas 96 h<br>LC50 = 10700 mg/L Pimephales promelas 96 h | EC50 = 3038 mg/L 5 min   | 2700 - 3700: 48 h Daphnia magna mg/L EC50 | 0.13986 |
| 1,2,4- Trimethylbenzene  | No information available. | LC50 7.19 - 8.28 mg/L Pimephales promelas 96 h<br>LC50 = 7.72 mg/L Pimephales promelas 96 h   | No information available | 6.14: 48 h Daphnia magna mg/L EC50        | 3.63    |

Persistence and Degradability  
Bioaccumulation  
Mobility

No information available.  
No information available.  
No information available.

### 13. DISPOSAL CONSIDERATIONS

Product Disposal  
Container Disposal

Dispose of in accordance with local regulations.  
Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

### 14. TRANSPORT INFORMATION

DOT

|                      |                           |
|----------------------|---------------------------|
| Proper Shipping Name | Consumer commodity        |
| Hazard Class         | ORM-D                     |
| Description          | Consumer commodity, ORM-D |

TDG

|                      |                                |
|----------------------|--------------------------------|
| Proper shipping name | Aerosols                       |
| Hazard Class         | 2.1                            |
| UN-No                | UN1950                         |
| Description          | UN1950, AEROSOLS, 2.1, LTD QTY |

ICAO

|                      |   |
|----------------------|---|
| UN-No                | UN1950                                  |
| Proper Shipping Name | Aerosols                                |
| Hazard Class         | 2.1                                     |
| Shipping Description | UN1950, AEROSOLS, FLAMMABLE 2.1 LTD QTY |

IATA

|                      |  |
|----------------------|--|
| UN-No                | UN1950                                   |
| Proper Shipping Name | Aerosols, flammable                      |
| Hazard Class         | 2.1                                      |
| ERG-Code             | 10L                                      |
| Shipping Description | UN1950, AEROSOLS, FLAMMABLE ,2.1 LTD QTY |

IMDG/IMO

|                      |                                 |
|----------------------|---------------------------------|
| Proper Shipping Name | Aerosols                        |
| Hazard Class         | 2                               |
| UN-No                | UN1950                          |
| EmS No.              | F-D, S-U                        |
| Description          | UN1950, AEROSOLS, ,2.1, LTD QTY |

### 15. REGULATORY INFORMATION

Inventories

|                          |          |
|--------------------------|----------|
| TSCA                     | Complies |
| DSL                      | Complies |
| U.S. Federal Regulations |          |

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals

which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Component               | CAS No. | Weight % * | SARA 313 - Threshold Values |
|-------------------------|---------|------------|-----------------------------|
| 1,2,4- Trimethylbenzene | 95-63-6 | 0.1-1      | 1.0                         |

**SARA 311/312 Hazardous Categorization**

| Acute Health Hazard | Chronic Health Hazard | Fire Hazard | Sudden Release of Pressure Hazard | Reactive Hazard |
|---------------------|-----------------------|-------------|-----------------------------------|-----------------|
| Yes                 | Yes                   | Yes         | Yes                               | No              |

CERCLA

**16. OTHER INFORMATION**

Prepared By Laura Strauss  
Supersedes Date 10/22/2013  
Issuing Date 01/12/2016  
Reason for Revision No information available.  
Glossary No information available.  
List of References. No information available.

**CERTIFIED LABS, DIV. OF NCH CORP.** assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

# SAFETY DATA SHEET



Easy Task

## Section 1. Identification

**Product identifier** : Easy Task  
**Product code** : 608  
**Other means of identification** : Not available.  
**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

| Identified uses                           |        |
|---|--------|
| Restorer                                  |        |
| Uses advised against                      | Reason |
| For Industrial and Institutional Use Only | -      |

**Supplier's details** : Betco Corporation  
1690 Huron Church Road, Suite 169  
Windsor ON N9C0AC CA  
  
400 Van Camp Road  
Bowling Green, OH 43402 US  
www.betco.com  
888-462-3826

**Emergency telephone number (with hours of operation)** : Chemtrec (800) 424-9300 24 hour

## Section 2. Hazard identification

**Classification of the substance or mixture** : Not classified.

### GHS label elements

**Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.  
**Precautionary statements**  
**Prevention** : Not applicable.  
**Response** : Not applicable.  
**Storage** : Not applicable.  
**Disposal** : Not applicable.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

| Ingredient name | % (w/w) | CAS number |
|-----------------|---------|------------|
| ethanediol      | 1 - 5   | 107-21-1   |

## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

- |                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.   |
| <b>Inhalation</b>   | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.   |
| <b>Skin contact</b> | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  |
| <b>Ingestion</b>    | : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- |                     |   |
|---------------------|---|
| <b>Eye contact</b>  | : No known significant effects or critical hazards. |
| <b>Inhalation</b>   | : No known significant effects or critical hazards. |
| <b>Skin contact</b> | : No known significant effects or critical hazards. |
| <b>Ingestion</b>    | : No known significant effects or critical hazards. |

#### Over-exposure signs/symptoms

- |                     |                     |
|---------------------|---------------------|
| <b>Eye contact</b>  | : No specific data. |
| <b>Inhalation</b>   | : No specific data. |
| <b>Skin contact</b> | : No specific data. |
| <b>Ingestion</b>    | : No specific data. |

### Indication of immediate medical attention and special treatment needed, if necessary

- |                                   |   |
|-----------------------------------|---|
| <b>Notes to physician</b>         | : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| <b>Specific treatments</b>        | : No specific treatment.  |
| <b>Protection of first-aiders</b> | : No action shall be taken involving any personal risk or without suitable training.  |

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- |                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | : Use an extinguishing agent suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | : None known.   |

- |   |  |
|---|--|
| <b>Specific hazards arising from the chemical</b> | : In a fire or if heated, a pressure increase will occur and the container may burst.              |
| <b>Hazardous thermal decomposition products</b>   | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide |

## Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name | Exposure limits   |
|-----------------|---|
| ethanediol      | <p><b>CA British Columbia Provincial (Canada, 7/2018).</b><br/> C: 100 mg/m<sup>3</sup> Form: Aerosol<br/> TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Particulate<br/> STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: Particulate<br/> C: 50 ppm Form: Vapour</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b><br/> C: 100 mg/m<sup>3</sup> Form: Aerosol only.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/> CELL: 100 mg/m<sup>3</sup> Form: aerosol</p> <p><b>CA Alberta Provincial (Canada, 6/2018).</b><br/> C: 100 mg/m<sup>3</sup></p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b><br/> STEV: 50 ppm 15 minutes. Form: vapour and mist<br/> STEV: 127 mg/m<sup>3</sup> 15 minutes. Form: vapour and mist</p> |

### **Appropriate engineering controls**

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### Skin protection

#### **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

|  |  |
|--|--|
| Physical state                               | : Liquid.  |
| Color  | : Green.   |
| Odor   | : Fruity.  |
| Odor threshold                               | : Not available.   |
| pH   | : 8 to 9.5   |
| Melting point                                | : Not available.   |
| Boiling point                                | : Not available.   |
| Flash point                                  | : Closed cup: Not applicable. [Product does not sustain combustion.]   |
| Evaporation rate                             | : Not available.   |
| Flammability (solid, gas)                    | : Not available.   |
| Lower and upper explosive (flammable) limits | : Not available.   |
| Vapor pressure                               | : Not available.   |
| Vapor density                                | : Not available.   |
| Relative density                             | : 0.9925   |
| Solubility                                   | : Easily soluble in the following materials: cold water and hot water. |
| Solubility in water                          | : Not available.   |
| Partition coefficient: n-octanol/water       | : Not available.   |
| Auto-ignition temperature                    | : Not available.   |
| Decomposition temperature                    | : Not available.   |
| Viscosity                                    | : Not available.   |
| Flow time (ISO 2431)                         | : Not available.   |

## Section 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| Chemical stability                 | : The product is stable.   |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| Conditions to avoid                | : No specific data.  |
| Incompatible materials             | : Not available.   |
| Hazardous decomposition products   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result    | Species | Dose       | Exposure |
|-------------------------|-----------|---------|------------|----------|
| ethanediol              | LD50 Oral | Rat     | 4700 mg/kg | -        |

#### Irritation/Corrosion

## Section 11. Toxicological information

| Product/ingredient name | Result                   | Species | Score | Exposure                | Observation |
|-------------------------|--------------------------|---------|-------|-------------------------|-------------|
| ethanediol              | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams | -           |
|                         | Eyes - Mild irritant     | Rabbit  | -     | 1 hours 100 milligrams  | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 6 hours 1440 milligrams | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 555 milligrams          | -           |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral.  
Routes of entry not anticipated: Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result                               | Species                                    | Exposure |
|-------------------------|--------------------------------------|--|----------|
| ethanediol              | Acute LC50 6900000 µg/l Fresh water  | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
|                         | Acute LC50 41000000 µg/l Fresh water | Daphnia - Daphnia magna - Neonate          | 48 hours |
|                         | Acute LC50 8050000 µg/l Fresh water  | Fish - Pimephales promelas                 | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethanediol              | -1.36              | -   | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>TDG<br/>Classification</b> | <b>DOT<br/>Classification</b> | <b>ADR/RID</b> | <b>IMDG</b>    | <b>IATA</b>    |
|-----------------------------------|-------------------------------|-------------------------------|----------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.                | Not regulated.                | Not regulated. | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                             | -                             | -              | -              | -              |
| <b>Transport hazard class(es)</b> | -                             | -                             | -              | -              | -              |
| <b>Packing group</b>              | -                             | -                             | -              | -              | -              |
| <b>Environmental hazards</b>      | No.                           | No.                           | No.            | No.            | No.            |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : The following components are listed: ethylene glycol

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

**Australia** : Not determined.

**Canada** : Not determined.

**China** : Not determined.

**Europe** : At least one component is not listed.

**Japan** : **Japan inventory (ENCS):** Not determined.

**Japan inventory (ISHL):** At least one component is not listed.

**Malaysia** : Not determined

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

## Section 15. Regulatory information

|                      |   |
|----------------------|---|
| <b>Taiwan</b>        | : At least one component is not listed. |
| <b>Thailand</b>      | : Not determined.                       |
| <b>Turkey</b>        | : Not determined.                       |
| <b>United States</b> | : Not determined.                       |
| <b>Viet Nam</b>      | : Not determined.                       |

## Section 16. Other information

### History

**Date of printing** : 6/3/2020

**Date of issue/Date of revision** : 6/3/2020

**Date of previous issue** : 7/30/2019

**Version** : 1.01

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations
- HPR = Hazardous Products Regulations

### Procedure used to derive the classification

| Classification  | Justification |
|-----------------|---------------|
| Not classified. |               |

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## 1. IDENTIFICATION

|                     |   |
|---------------------|---|
| Product Name        | Comet® Cleaner with Bleach - Ready to Use   |
| Product Code(s)     | 3-30  |
| Product ID:         | 15154199_PROF_NG  |
| Product Type:       | Finished Product - Professional Use Only  |
| Recommended Use     | Hard Surface Cleaner  |
| Restrictions on Use | Do not mix with other cleaning products or chemicals as irritating fumes may be formed.   |
| Manufacturer        | Procter & Gamble Professional<br>2 P&G Plaza<br>Cincinnati, Ohio 45202<br><br>Procter & Gamble Inc.<br>P.O. Box 355, Station A<br>Toronto, ON M5W 1C5<br><br>1-800-332-7787 |
| E-mail Address      | pgsds.im@pg.com   |
| Emergency Telephone | Transportation (24 HR)<br>CHEMTREC - 1-800-424-9300<br>(U.S./ Canada) or 1-703-527-3887<br>Mexico toll free in country: 800-681-9531  |

## 2. HAZARD IDENTIFICATION

This product is classified under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

**Hazard Category**

Eye Damage / Irritation  
Corrosive to metals

Category 2B  
Category 1

Signal Word

WARNING

Hazard Statements

Causes eye irritation  
May be corrosive to metals

Hazard pictograms



|  |   |
|--|---|
| <b>Precautionary Statements - Prevention</b>   | Wash hands thoroughly after handling<br>Keep only in original container<br>Do not mix with other cleaning products or chemicals as irritating fumes may be formed   |
| <b>Precautionary Statements - Response</b>     | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing<br>If eye irritation persists: Get medical advice/attention<br>IF SWALLOWED:<br>Drink 1 or 2 glasses of water<br>Absorb spillage to prevent material damage |
| <b>Precautionary Statements - Storage</b>      | Store in corrosive resistant container  |
| <b>Precautionary Statements - Disposal</b>     | Dispose of contents/container in accordance with local regulation   |
| <b>Hazards not otherwise classified (HNOC)</b> | None  |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

| Chemical Name                                     | Synonyms | Trade Secret | CAS-No    | Weight % |
|---|----------|--------------|-----------|----------|
| Sulfuric acid, monooctyl ester, sodium salt (1:1) | -        | No           | 142-31-4  | 1 - 5    |
| Sulfuric acid monododecyl ester sodium salt (1:1) | -        | No           | 151-21-3  | 1 - 5    |
| Sodium hypochlorite                               | -        | No           | 7681-52-9 | 1 - 5    |

### 4. FIRST AID MEASURES

#### First aid measures for different exposure routes

|   |   |
|---|---|
| <b>Eye contact</b>  | Rinse with plenty of water. Get medical attention immediately if irritation persists.                       |
| <b>Skin contact</b>                                       | Rinse with plenty of water. Get medical attention if irritation develops and persists.                      |
| <b>Ingestion</b>  | Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur. |
| <b>Inhalation</b>   | Move to fresh air. If symptoms persist, call a physician.   |
| <b>Most important symptoms/effects, acute and delayed</b> | None under normal use conditions.   |

#### Indication of immediate medical attention and special treatment needed, if necessary

|                           |                        |
|---------------------------|------------------------|
| <b>Notes to Physician</b> | Treat symptomatically. |
|---------------------------|------------------------|

### 5. FIRE-FIGHTING MEASURES

|                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | Dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray. |
| <b>Unsuitable Extinguishing Media</b> | None.  |

|   |  |
|---|--|
| <b>Special hazard</b>                                 | None known.  |
| <b>Special protective equipment for fire-fighters</b> | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |
| <b>Specific hazards arising from the chemical</b>     | None.  |

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

|  |   |
|--|---|
| <b>Personal precautions</b>            | Use personal protective equipment. Do not get in eyes, on skin, or on clothing. |
| <b>Advice for emergency responders</b> | Use personal protective equipment as required.                                  |

### Methods and materials for containment and cleaning up

|                                |   |
|--------------------------------|---|
| <b>Methods for containment</b> | Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.  |
| <b>Methods for cleaning up</b> | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). |

## 7. HANDLING AND STORAGE

### Precautions for safe handling

|                                |   |
|--------------------------------|---|
| <b>Advice on safe handling</b> | Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children. |
|--------------------------------|---|

### Conditions for safe storage, including any incompatibilities

|                              |  |
|------------------------------|--|
| <b>Storage Conditions</b>    | Keep containers tightly closed in a dry, cool and well-ventilated place. Store in corrosive resistant container. |
| <b>Incompatible products</b> | Do not mix with other cleaning products or chemicals as irritating fumes may be formed.                          |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

|                            |   |
|----------------------------|---|
| <b>Exposure Guidelines</b> | No exposure limits noted for ingredient(s). |
|----------------------------|---|

### Exposure controls

|                             |   |
|-----------------------------|---|
| <b>Engineering Measures</b> | <b>Distribution, Workplace and Household Settings:</b><br>Ensure adequate ventilation<br><br><b>Product Manufacturing Plant (needed at Product-Producing Plant ONLY):</b><br>Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction |
|-----------------------------|---|

### Personal Protective Equipment

|                       |  |
|-----------------------|--|
| <b>Eye Protection</b> | <b>Distribution, Workplace and Household Settings:</b><br>No special protective equipment required |
|-----------------------|--|

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**

Use appropriate eye protection

**Hand Protection****Distribution, Workplace and Household Settings:**

No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**

Protective gloves

**Skin and Body Protection****Distribution, Workplace and Household Settings:**

No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**

Wear suitable protective clothing

**Respiratory Protection****Distribution, Workplace and Household Settings:**

No special protective equipment required

**Product Manufacturing Plant (needed at Product-Producing Plant ONLY):**

In case of insufficient ventilation wear suitable respiratory equipment

|  |
|--|
| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b> |
|--|

**Physical State @20°C**

liquid

**Appearance**

clear

**Odor**

Scented

**Odor threshold**

No information available

PropertyValuesNote**pH value**

12.6 - 13.4

**Melting/freezing point**

No information available

**Boiling point/boiling range**

No information available

**Flash point**

&gt; 93.3 °C / &gt; 200 °F

**Evaporation rate**

No information available

**Flammability (solid, gas)**

No information available

**Flammability Limits in Air****Upper flammability limit**

No information available

**Lower Flammability Limit**

No information available

**Vapor pressure**

No information available

**Vapor density**

No information available

**Relative density**

1.045

**Water solubility**

100%

**Solubility in other solvents**

No information available

**Partition coefficient: n-octanol/water**

No information available

**Autoignition temperature**

No information available

**Decomposition temperature**

No information available

**Viscosity of Product**

No information available &lt; 10 cps

**Oxidizing properties**

These substances will accelerate burning when involved in a fire.

**VOC Content (%)**

Products comply with US state and federal regulations for VOC content in consumer products.

|                                     |
|-------------------------------------|
| <b>10. STABILITY AND REACTIVITY</b> |
|-------------------------------------|

**Reactivity**

None under normal use conditions.

**Stability**

Stable under normal conditions.

**Hazardous polymerization**

Hazardous polymerization does not occur.

|   |   |
|---|---|
| <b>Hazardous Reactions</b>              | None under normal processing.   |
| <b>Conditions to Avoid</b>              | None under normal processing.   |
| <b>Materials to avoid</b>               | Do not mix with other cleaning products or chemicals as irritating fumes may be formed. |
| <b>Hazardous Decomposition Products</b> | None under normal use.  |

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Information on likely routes of exposure

|                     |                     |
|---------------------|---------------------|
| <b>Inhalation</b>   | No known effect.    |
| <b>Skin contact</b> | No known effect.    |
| <b>Ingestion</b>    | No known effect.    |
| <b>Eye contact</b>  | Irritating to eyes. |

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |                     |
|--|---------------------|
| <b>Acute toxicity</b>                    | No known effect.    |
| <b>Skin corrosion/irritation</b>         | No known effect.    |
| <b>Serious eye damage/eye irritation</b> | Irritating to eyes. |
| <b>Skin sensitization</b>                | No known effect.    |
| <b>Respiratory sensitization</b>         | No known effect.    |
| <b>Germ cell mutagenicity</b>            | No known effect.    |
| <b>Neurological Effects</b>              | No known effect.    |
| <b>Reproductive toxicity</b>             | No known effect.    |
| <b>Developmental toxicity</b>            | No known effect.    |
| <b>Teratogenicity</b>                    | No known effect.    |
| <b>STOT - single exposure</b>            | No known effect.    |
| <b>STOT - repeated exposure</b>          | No known effect.    |
| <b>Target Organ Effects</b>              | No known effect.    |
| <b>Aspiration hazard</b>                 | No known effect.    |
| <b>Carcinogenicity</b>                   | No known effect.    |

### Component Information

| Chemical Name                                     | CAS-No    | LD50 Oral  | LD50 Dermal  | LC50 Inhalation                                 |
|---|-----------|--|--|---|
| Sulfuric acid monododecyl ester sodium salt (1:1) | 151-21-3  | 977 mg/kg bw (OECD 401; rat)                                   | > 500 mg/kg bw (Read across data C10-16ASO <sub>4</sub> , NH <sub>4</sub> ; guideline: Standard Procedure #10; fixed dose procedure; rabbit; based on active ingredient) | -   |
| Sodium hypochlorite                               | 7681-52-9 | 626 mg/kg bw (Similar to OECD 401; standard acute method; rat) | > 20000 mg/kg bw (Guideline: 16 CFR 1500.40 and similar to OECD 402; rabbit)   | > 10.5 mg/L air (Similar to OECD 403; rat; 1 h) |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic organisms.

|                                      |                           |
|--------------------------------------|---------------------------|
| <b>Persistence and degradability</b> | No information available. |
| <b>Bioaccumulative potential</b>     | No information available. |
| <b>Mobility</b>                      | No information available. |
| <b>Other adverse effects</b>         | No information available. |

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment

#### **Waste from Residues / Unused Products**

Products covered by this MSDS, in their original form, when disposed as waste, are corrosive hazardous waste, D002, according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations.

#### **Contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Codes** 331  
(non-household setting)

### 14. TRANSPORT INFORMATION

#### DOT

|                                |   |
|--------------------------------|---|
| <b>UN no</b>                   | UN1760  |
| <b>UN Proper shipping name</b> | Corrosive liquids, n.o.s.   |
| <b>Description</b>             | UN1760, Corrosive liquid, n.o.s, (sodium hydroxide, sodium hypochlorite), 8,III , Ltd. Qty. |
| <b>Hazard Class</b>            | 8   |
| <b>Packing Group</b>           | III   |

#### IMDG

|                                   |   |
|-----------------------------------|---|
| <b>UN Number</b>                  | UN1760  |
| <b>UN Proper shipping name</b>    | Corrosive liquid, n.o.s.  |
| <b>Description</b>                | UN1760, Corrosive liquid, n.o.s , (sodium hydroxide, sodium hypochlorite), 8, III, MARINE POLLUTANT , Ltd. Qty. |
| <b>Transport hazard class(es)</b> | 8   |
| <b>Packing Group</b>              | III   |

#### IATA

|                                |   |
|--------------------------------|---|
| <b>UN no</b>                   | UN1760  |
| <b>UN Proper shipping name</b> | Corrosive liquid, n.o.s.  |
| <b>Description</b>             | UN1760, Corrosive liquid, n.o.s, (sodium hydroxide, sodium hypochlorite), 8,III , Ltd. Qty. |
| <b>Hazard Class</b>            | 8   |
| <b>Packing Group</b>           | III   |

### 15. REGULATORY INFORMATION

#### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name       | CAS-No    | Hazardous Substances RQs | Extremely Hazardous Substances RQs | CERCLA/SARA 302 TPQ |
|---------------------|-----------|--------------------------|------------------------------------|---------------------|
| Sodium hypochlorite | 7681-52-9 | 100 lb                   | -                                  |                     |
| Sodium hydroxide    | 1310-73-2 | 1000 lb                  | -                                  |                     |

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name       | CAS-No    | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sodium hypochlorite | 7681-52-9 | 100 lb                      | -                      | -                         | X                          |
| Sodium hydroxide    | 1310-73-2 | 1000 lb                     | -                      | -                         | X                          |

**California Proposition 65**

This product is not subject to warning labeling under California Proposition 65.

**U.S. State Regulations (RTK)**

| Chemical Name       | CAS-No    | New Jersey |
|---------------------|-----------|------------|
| Sodium hypochlorite | 7681-52-9 | X          |

| Chemical Name       | CAS-No    | Massachusetts |
|---------------------|-----------|---------------|
| Sodium hypochlorite | 7681-52-9 | X             |

| Chemical Name       | CAS-No    | Pennsylvania |
|---------------------|-----------|--------------|
| Sodium hypochlorite | 7681-52-9 | X            |
| Sodium hydroxide    | 1310-73-2 | X            |

| Chemical Name       | CAS-No    | Rhode Island |
|---------------------|-----------|--------------|
| Sodium hypochlorite | 7681-52-9 | X            |

**International Inventories****United States**

All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

**Canada**

This product is in compliance with CEPA for import by P&G.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**CEPA** - Canadian Environmental Protection Act

## 16. OTHER INFORMATION

**HMIS Ratings**

|                 |   |
|-----------------|---|
| Health hazard   | 2 |
| Flammability    | 1 |
| Physical hazard | 0 |

**NFPA Ratings**

|               |   |
|---------------|---|
| Health hazard | 2 |
| Flammability  | 1 |
| Instability   | 0 |

**Issuing Date:** 09-Jan-2015

**Revision Date:** 07-Apr-2015

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : PROCLEAN CONCENTRATED GLASS CLEANER

Other means of identification : Not applicable

Recommended use : Glass Cleaner

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 4.69 % - 4.69 %

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-866-444-7450

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 05/14/2019

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**
**Product AS SOLD**

Eye irritation : Category 2B

**Product AT USE DILUTION**

Not a hazardous substance or mixture.

**GHS label elements**
**Product AS SOLD**

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**  
Wash skin thoroughly after handling.  
**Response:**  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

**Product AT USE DILUTION**

Precautionary Statements : **Prevention:**  
Wash hands thoroughly after handling.  
**Response:**  
Get medical advice/ attention if you feel unwell.  
**Storage:**  
Store in accordance with local regulations.

**Product AS SOLD**

Other hazards : None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

#### Product AS SOLD

Pure substance/mixture : Mixture

#### Chemical name

d-glucopyranose, oligomeric, decyl octyl glycosides

#### CAS-No.

68515-73-1

#### Concentration (%)

5 - 10

#### Product AT USE DILUTION

No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

#### Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Product AS SOLD

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides

Special protective equipment for fire-fighters : Use personal protective equipment.

Specific extinguishing : Fire residues and contaminated fire extinguishing water must be

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

methods

disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

##### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

#### SECTION 7. HANDLING AND STORAGE

##### Product AS SOLD

Advice on safe handling : Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 5 °C to 50 °C

##### Product AT USE DILUTION

Advice on safe handling : Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Product AS SOLD

###### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

###### Personal protective equipment

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

|                        |  |
|------------------------|--|
| Eye protection         | : No special protective equipment required.                              |
| Hand protection        | : No special protective equipment required.                              |
| Skin protection        | : No special protective equipment required.                              |
| Respiratory protection | : No personal respiratory protective equipment normally required.        |
| Hygiene measures       | : Handle in accordance with good industrial hygiene and safety practice. |

#### Product AT USE DILUTION

|                      |  |
|----------------------|--|
| Engineering measures | : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
|----------------------|--|

#### Personal protective equipment

|                        |   |
|------------------------|---|
| Eye protection         | : No special protective equipment required.                       |
| Hand protection        | : No special protective equipment required.                       |
| Skin protection        | : No special protective equipment required.                       |
| Respiratory protection | : No personal respiratory protective equipment normally required. |

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

|   | Product AS SOLD                                | Product AT USE DILUTION |
|---|--|-------------------------|
| Appearance                              | : liquid                                       | liquid                  |
| Color                                   | : blue   | light blue              |
| Odor                                    | : Perfumes, fragrances                         | Perfumes, fragrances    |
| pH                                      | : 10.4 - 11.7, (100 %)                         | 7.0 - 8.0               |
| Flash point                             | : Not applicable, Does not sustain combustion. |                         |
| Odor Threshold                          | : No data available                            |                         |
| Melting point/freezing point            | : No data available                            |                         |
| Initial boiling point and boiling range | : 100 °C                                       |                         |
| Evaporation rate                        | : No data available                            |                         |
| Flammability (solid, gas)               | : No data available                            |                         |
| Upper explosion limit                   | : No data available                            |                         |
| Lower explosion limit                   | : No data available                            |                         |
| Vapor pressure                          | : No data available                            |                         |
| Relative vapor density                  | : No data available                            |                         |
| Relative density                        | : 0.99 - 1.05                                  |                         |
| Water solubility                        | : soluble                                      |                         |
| Solubility in other solvents            | : No data available                            |                         |
| Partition coefficient: n-octanol/water  | : No data available                            |                         |
| Autoignition temperature                | : No data available                            |                         |

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

|                       |  |
|-----------------------|--|
| Thermal decomposition | : No data available  |
| Viscosity, kinematic  | : No data available  |
| Explosive properties  | : No data available  |
| Oxidizing properties  | : The substance or mixture is not classified as oxidizing. |
| Molecular weight      | : No data available  |
| VOC                   | : No data available  |

#### SECTION 10. STABILITY AND REACTIVITY

##### Product AS SOLD

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : No dangerous reaction known under conditions of normal use.                  |
| Chemical stability                 | : Stable under normal conditions.  |
| Possibility of hazardous reactions | : No dangerous reaction known under conditions of normal use.                  |
| Conditions to avoid                | : None known.  |
| Incompatible materials             | : None known.  |
| Hazardous decomposition products   | : Decomposition products may include the following materials:<br>Carbon oxides |

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

##### Potential Health Effects

##### Product AS SOLD

|                  |   |
|------------------|---|
| Eyes             | : Causes eye irritation.                                      |
| Skin             | : Health injuries are not known or expected under normal use. |
| Ingestion        | : Health injuries are not known or expected under normal use. |
| Inhalation       | : Health injuries are not known or expected under normal use. |
| Chronic Exposure | : Health injuries are not known or expected under normal use. |

##### Product AT USE DILUTION

|                  |   |
|------------------|---|
| Eyes             | : Health injuries are not known or expected under normal use. |
| Skin             | : Health injuries are not known or expected under normal use. |
| Ingestion        | : Health injuries are not known or expected under normal use. |
| Inhalation       | : Health injuries are not known or expected under normal use. |
| Chronic Exposure | : Health injuries are not known or expected under normal use. |

##### Experience with human exposure

##### Product AS SOLD

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

|              |                                  |
|--------------|----------------------------------|
| Eye contact  | : Redness, Irritation            |
| Skin contact | : No symptoms known or expected. |
| Ingestion    | : No symptoms known or expected. |
| Inhalation   | : No symptoms known or expected. |

#### Product AT USE DILUTION

|              |                                  |
|--------------|----------------------------------|
| Eye contact  | : No symptoms known or expected. |
| Skin contact | : No symptoms known or expected. |
| Ingestion    | : No symptoms known or expected. |
| Inhalation   | : No symptoms known or expected. |

#### Toxicity

##### Product AS SOLD

##### Product

|                                   |   |
|-----------------------------------|---|
| Acute oral toxicity               | : Acute toxicity estimate : > 5,000 mg/kg |
| Acute inhalation toxicity         | : No data available                       |
| Skin corrosion/irritation         | : No data available                       |
| Serious eye damage/eye irritation | : Mild eye irritation                     |
| Respiratory or skin sensitization | : No data available                       |
| Carcinogenicity                   | : No data available                       |
| Reproductive effects              | : No data available                       |
| Germ cell mutagenicity            | : No data available                       |
| Teratogenicity                    | : No data available                       |
| STOT-single exposure              | : No data available                       |
| STOT-repeated exposure            | : No data available                       |
| Aspiration toxicity               | : No data available                       |

### SECTION 12. ECOLOGICAL INFORMATION

##### Product AS SOLD

##### Ecotoxicity

|                       |   |
|-----------------------|---|
| Environmental Effects | : This product has no known ecotoxicological effects. |
|-----------------------|---|

##### Product

|   |                     |
|---|---------------------|
| Toxicity to fish                                    | : No data available |
| Toxicity to daphnia and other aquatic invertebrates | : No data available |
| Toxicity to algae                                   | : No data available |

##### Components

|                   |   |
|-------------------|---|
| Toxicity to algae | : d-glucopyranose, oligomeric, decyl octyl glycosides<br>72 h EC50: 18 mg/l |
|-------------------|---|

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

#### Persistence and degradability

##### Product AS SOLD

Readily biodegradable.

##### Product AT USE DILUTION

Readily biodegradable.

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Product AS SOLD

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

#### Product AT USE DILUTION

Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

#### Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

#### Land transport (DOT)

Not dangerous goods

#### Sea transport (IMDG/IMO)

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

#### Product AS SOLD

#### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Serious eye damage or eye irritation

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

**SARA 302** : This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

#### California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

| Chemical Name                                       | CAS-No.    | Function       | List(s)        |
|---|------------|----------------|----------------|
| water   | 7732-18-5  | Diluent        | Not Applicable |
| d-glucopyranose, oligomeric, decyl octyl glycosides | 68515-73-1 | Cleaning Agent | Not Applicable |
| Polyol  | Withheld   | Cleaning Agent | Not Applicable |
| Polycarboxylate salt                                | Withheld   | Cleaning Agent | Not Applicable |
| oxydipropanol                                       | 25265-71-8 | Fragrance      | Not Applicable |
| Organic acid  | Withheld   | Buffer         | Not Applicable |
| Coumarin  | 91-64-5    | Fragrance      | FRA            |
| 1,6-Octadien-3-ol, 3,7-dimethyl-, 3-acetate         | 115-95-7   | Fragrance      | Not Applicable |
| Colorant  | Withheld   | Dye            | Not Applicable |
| Isothiazolinones                                    | Withheld   | Biocide        | Not Applicable |
| Silicone  | Withheld   | Processing Aid | Not Applicable |
| Cellulose ether                                     | Withheld   | Processing Aid | Not Applicable |

\*refer to [ecolab.com/sds](http://ecolab.com/sds) for electronic links to designated lists

**The ingredients of this product are reported in the following inventories:**

**Switzerland. New notified substances and declared preparations :**  
not determined

**United States TSCA Inventory :**  
All substances listed as active on the TSCA inventory

**Canadian Domestic Substances List (DSL) :**  
All components of this product are on the Canadian DSL

**Australia Inventory of Chemical Substances (AICS) :**  
On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemical Substances :**  
not determined

**Japan. ENCS - Existing and New Chemical Substances Inventory :**  
On the inventory, or in compliance with the inventory

**Korea. Korean Existing Chemicals Inventory (KECI) :**  
On the inventory, or in compliance with the inventory

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
On the inventory, or in compliance with the inventory

## SAFETY DATA SHEET

### PROCLEAN CONCENTRATED GLASS CLEANER

China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

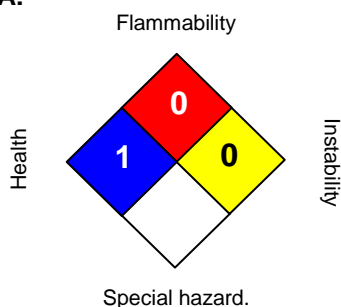
Taiwan Chemical Substance Inventory (TCSI) :

not determined

### SECTION 16. OTHER INFORMATION

#### Product AS SOLD

##### NFPA:



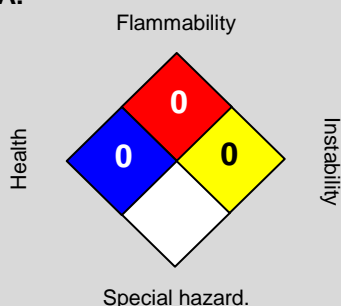
##### HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 1 |
| FLAMMABILITY    | 0 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

#### Product AT USE DILUTION

##### NFPA:



##### HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 0 |
| FLAMMABILITY    | 0 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Issuing date : 05/14/2019  
Version : 1.2  
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** DC 33  
**Product Code:** A0151  
**Recommended Use:** Disinfectant/Detergent Cleaner

**Company**

Auto-Chlor System  
746 Poplar Avenue  
Memphis, TN 38105  
Questions/Comments: 901-579-2300

**Emergency Telephone Numbers****MEDICAL:** 1-866-923-4946 (PROSAR)**SPILLS:** 1-800-424-9300 (CHEMTREC)**2. HAZARDS IDENTIFICATION****GHS Hazard Classification****Signal Word:** DANGER**Acute Toxicity:** Category 4 (oral)**Acute Toxicity:** Category 4 (dermal)**Skin Corrosion:** Category 1B**Eye Irritation:** Category 1**HAZARD STATEMENTS**

H314: Causes severe skin burns and eye  
H302: Harmful if swallowed  
H312: Harmful in contact with skin

**PRECAUTIONARY STATEMENTS**

P260: Do not breathe mist/vapors or spray  
P264: Wash hands thoroughly after handling  
P280: Wear eye protection and protective gloves  
P301-306: See Section 4 for information  
P405: Store locked up  
P501: Dispose of contents and container in  
accordance with local, state and federal  
regulations  
P301/312: If swallowed, call a poison  
center/doctor  
if you feel unwell.  
P330: Rinse mouth.  
P302/P352: If on skin, wash with plenty soap and  
water.  
P362/P364: Take off contaminated clothing and  
wash it before reuse.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENTS                                    | CAS NO.    | % COMPOSITION* |
|--|------------|----------------|
| n-alkyl dimethyl benzyl ammonium chloride      | 68931-01-5 | 1 – 5          |
| n-alkyl dimethyl ethylbenzyl ammonium chloride | 68956-79-6 | 1 - 5          |
| Sodium Carbonate                               | 497-19-5   | 1 - 5          |
| Tetrasodium ethylenediaminetetraacetate        | 64-02-8    | 1 – 5          |
| Fragrance                                      | Mixture    | <1.0           |

\* Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**IF SWALLOWED:** Rinse mouth. Do NOT induce vomiting.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.

**IF ON SKIN:** Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center if you feel unwell.

### 5. FIREFIGHTING MEASURES

**Extinguishing Media:** Class A/B/C fire extinguisher, dry chemical, carbon dioxide, or foam

**Specific Hazards:** None known

**Protective Equipment:** Wear full protective clothing and self-contained breathing apparatus

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Isolate spill or leak area immediately. Adequately ventilate area.

**Protective Equipment:** Wear appropriate personal protective equipment as specified in Section 8.

**Cleanup Procedures:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

### 7. HANDLING AND STORAGE

**Handling Precautions:** Avoid contact with skin, eyes and clothing. Do not taste or swallow. Wash thoroughly after handling and before eating. Avoid breathing vapors or mists. Remove and wash contaminated clothing and footwear before re-use. FOR INDUSTRIAL AND INSTITUTIONAL USE ONLY.

**Storage:** Protect from freezing. Store locked up. Keep tightly closed in a dry, cool and well ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|  |   |
|--|---|
| <b>Occupational Exposure Limits:</b>     | No occupational exposure limits established for this product.             |
| <b>Appropriate Engineering Controls:</b> | Good general ventilation should be sufficient to control airborne levels. |
| <b>Personal Protective Equipment</b>     |   |
| <b>Eye Protection:</b>                   | Wear protective glasses, goggles or eye shield.                           |
| <b>Skin Protection:</b>                  | Wear impervious protective clothing, including gloves and apron.          |
| <b>Respiratory Protection:</b>           | In case of insufficient ventilation, wear suitable respiratory equipment. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                          |   |
|--------------------------|---|
| <b>Appearance:</b>       | <b>Evaporation Rate:</b>                  |
| Clear yellow liquid      | No information available                  |
| <b>Odor:</b>             | <b>Vapor Density:</b>                     |
| Citrus fragrance         | No information available                  |
| <b>pH:</b>               | <b>Vapor Pressure:</b>                    |
| 11.7                     | No information available                  |
| <b>Specific Gravity:</b> | <b>Partition Coefficient:</b>             |
| 1.038 g/ml               | No information available                  |
| <b>Solubility:</b>       | <b>Auto-Ignition Temperature:</b>         |
| Soluble in water         | No information available                  |
| <b>Flash Point:</b>      | <b>Decomposition Temperature:</b>         |
| >200°F                   | No information available                  |
| <b>Boiling Point:</b>    | <b>Melting/Freezing Point:</b>            |
| 212°F                    | No information available                  |
| <b>Viscosity:</b>        | <b>Flammability:</b>                      |
| No information available | No information available                  |
| <b>Odor Threshold:</b>   | <b>Lower Explosive / Upper Explosive:</b> |
| No information available | No information available                  |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| <b>Stability:</b>                        | Stable under normal conditions                                  |
| <b>Hazardous Polymerization:</b>         | Not expected to occur with normal handling and storage          |
| <b>Incompatibility:</b>                  | Strong oxidizing agents and strong acids                        |
| <b>Hazardous Decomposition Products:</b> | May include carbon monoxide, carbon dioxide and nitrogen oxides |

## 11. TOXICOLOGY INFORMATION

|                                   |   |
|-----------------------------------|---|
| <b>Likely Routes of Exposure:</b> | Inhalation, ingestion, eye and skin contact |
| <b>Acute Symptoms</b>             |   |

|                              |   |
|------------------------------|---|
| <b>Eye and Skin Contact:</b> | Corrosive. May cause severe burns.  |
| <b>Ingestion:</b>            | Corrosive. May cause burns to mouth, throat and stomach.                          |
| <b>Inhalation:</b>           | May cause irritation and corrosive effects to nose, throat and respiratory tract. |
| <b>Chronic Effects:</b>      | None known  |

## 12.ECOLOGICAL INFORMATION

This product is toxic to fish and aquatic invertebrates.

## 13.DISPOSAL CONSIDERATIONS

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## 14.TRANSPORT INFORMATION

|                              |                |
|------------------------------|----------------|
| <b>UN Number:</b>            | Not classified |
| <b>Proper Shipping Name:</b> | Not classified |
| <b>Hazard Class:</b>         | Not classified |
| <b>Packing Group:</b>        | Not classified |

## 15.REGULATORY INFORMATION

**EPA REGISTRATION NUMBER:** 1839-95-6243

### EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use, pesticide storage and container handling. Following is the hazard information as required on the pesticide label:

**DANGER. KEEP OUT OF REACH OF CHILDREN. CORROSIVE.** Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear goggles or face shield, rubber gloves, and protective clothing. Harmful if swallowed. Remove contaminated clothing and wash before reuse. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**California Cleaning Product Right to Know Act of 2017 (SB 258)**

This regulation applies to this product.

| INGREDIENTS                                    | CAS NO.    | FUNCTION      |
|--|------------|---------------|
| n-alkyl dimethyl benzyl ammonium chloride      | 68931-01-5 | Antimicrobial |
| n-alkyl dimethyl ethylbenzyl ammonium chloride | 68956-79-6 | Antimicrobial |
| Sodium Carbonate                               | 497-19-5   | Builder       |
| Tetrasodium ethylenediaminetetraacetate        | 64-02-8    | Chelant       |
| Fragrance*                                     | Mixture    | Fragrance     |

\*Contains the following fragrance allergens:

| FRAGRANCE ALLERGEN | CAS NO.   | PERCENTAGE |
|--------------------|-----------|------------|
| <i>d</i> -Limonene | 5989-27-5 | 0.04%      |
| Citral             | 5392-40-5 | 0.01%      |

## 16. OTHER INFORMATION

**Revision Date:** 01/10/20  
**Supersedes:** 08/21/18  
**Reason for Revision:** Updated Section 15

**Notice to Reader:** This Safety Data Sheet has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.



## **SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

### **1. PRODUCT AND COMPANY IDENTIFICATION**

**Product information**

**Product name** : SCRUBBING BUBBLES® DISINFECTANT RESTROOM  
CLEANER II (EPA 89900-2)

**Recommended use** : Hard Surface Cleaner

**Restrictions on use** : Use only as directed on label

**Manufacturer, importer,  
supplier** : S.C. Johnson & Son, Inc.  
1525 Howe Street  
Racine WI 53403-2236

**Telephone** : +1-800-558-5252

**Emergency telephone  
number** : 24 Hour Medical Emergency Phone: (866)231-5406  
24 Hour Transport Emergency Phone: (800)424-9300

### **2. HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

**Globally Harmonized System (GHS) Classification**

| <b>Hazard classification</b> | <b>Hazard category</b> | <b>Hazards identification</b>                          |
|------------------------------|------------------------|--|
| Gases under pressure         | Liquefied gas          | Contains gas under pressure;<br>may explode if heated. |

**Labelling**

**Precautionary statements**

**Other hazards** : Intentional misuse by deliberately concentrating and inhaling  
contents can be harmful or fatal.  
Excessive exposure to spray mist, fog or vapour may cause  
respiratory irritation.

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical name                           | CAS-No.    | Weight percent |
|---|------------|----------------|
| Isobutane                               | 75-28-5    | 5.00 - 10.00   |
| Alkyl dimethyl benzyl ammonium chloride | 68424-85-1 | 0.0001 - 0.10  |
| Decyldimethyloctylammonium chloride     | 32426-11-2 | 0.0001 - 0.10  |
| Dimethyldioctylammonium chloride        | 5538-94-3  | 0.0001 - 0.10  |
| Didecyldimethylammonium chloride        | 7173-51-5  | 0.0001 - 0.10  |

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

For additional information on product ingredients, see [www.whatsinsidescjohnson.com](http://www.whatsinsidescjohnson.com).

**4. FIRST AID MEASURES****Description of first aid measures**

**Eye contact** : No special requirements

**Skin contact** : No special requirements

**Inhalation** : No special requirements.

**Ingestion** : No special requirements

**Most important symptoms and effects, both acute and delayed**

Eyes : May irritate eyes.

Skin effect : No adverse effects expected when used as directed.

Inhalation : Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal. Excessive exposure to spray mist, fog or vapour may cause respiratory irritation.

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

Ingestion : No adverse effects expected when used as directed.

### Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

## 5. FIREFIGHTING MEASURES

**Suitable extinguishing media** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Specific hazards during firefighting** : Aerosol Product - Containers may rocket or explode in heat of fire.

**Further information** : Fight fire from maximum distance or protected area. Cool and use caution when approaching or handling fire-exposed containers. Wear full protective clothing and positive pressure self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** : Remove all sources of ignition.  
Wash thoroughly after handling.

**Environmental precautions** : Outside of normal use, avoid release to the environment.

**Methods and materials for containment and cleaning up** : Sweep up and shovel into suitable containers for disposal.  
Clean residue from spill site.

## 7. HANDLING AND STORAGE

### Handling

**Precautions for safe handling** : Avoid contact with skin, eyes and clothing.  
For personal protection see section 8.

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

KEEP OUT OF REACH OF CHILDREN AND PETS.

**Advice on protection  
against fire and explosion** : Normal measures for preventive fire protection.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Occupational Exposure Limits**

| Components | CAS-No. | mg/m3 | ppm       | Non-<br>standard<br>units | Basis         |
|------------|---------|-------|-----------|---------------------------|---------------|
| Isobutane  | 75-28-5 | -     | 1,000 ppm | -                         | ACGIH<br>STEL |

**Personal protective equipment**

**Respiratory protection** : No special requirements.

**Hand protection** : No special requirements.

**Eye protection** : No special requirements.

**Skin and body protection** : No special requirements.

**Hygiene measures** : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Form** : aerosol

**Color** : transparent colourless to light yellow

**Odour** : Marine/Ozone

**Odour Threshold** : Test not applicable for this product type

**pH** : 11.0 - 11.8  
at (25 C)

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

see user defined free text

**Melting point/freezing point** : Test not applicable for this product type

**Initial boiling point and boiling range** : 95 °C

**Flash point** : Test not applicable for this product type

**Evaporation rate** : Test not applicable for this product type

**Flammability (solid, gas)** : Does not sustain combustion.

**Upper/lower flammability or explosive limits** : Test not applicable for this product type

**Vapour pressure** : Test not applicable for this product type

**Vapour density** : Test not applicable for this product type

**Relative density** : 0.99 g/cm<sup>3</sup> at 55 °C estimated

**Solubility(ies)** : completely soluble

**Partition coefficient: n-octanol/water** : Test not applicable for this product type

**Auto-ignition temperature** : not auto-flammable

**Decomposition temperature** : Test not applicable for this product type  
No data available

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

|  |   |   |
|--|---|---|
| <b>Viscosity, dynamic</b>                                | : similar to water  |   |
| <b>Viscosity, kinematic</b>                              | : similar to water  |   |
| <b>Oxidizing properties</b>                              | : Test not applicable for this product type   |   |
| <b>Volatile Organic Compounds<br/>Total VOC (wt. %)*</b> | : 6.1 % - additional exemptions may apply<br>*as defined by US Federal and State Consumer Product Regulations |   |
| <b>Other information</b>                                 | : None identified   | : |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No dangerous reaction known under conditions of normal use.                |
| <b>Chemical stability</b>                 | : Stable under recommended storage conditions.                               |
| <b>Possibility of hazardous reactions</b> | : Stable under recommended storage conditions.                               |
| <b>Conditions to avoid</b>                | : Direct sources of heat.  |
| <b>Incompatible materials</b>             | : None known.  |
| <b>Hazardous decomposition products</b>   | : Thermal decomposition can lead to release of irritating gases and vapours. |

## 11. TOXICOLOGICAL INFORMATION

|                                  |                      |
|----------------------------------|----------------------|
| <b>Acute oral toxicity</b>       | : LD50 > 5,000 mg/kg |
| <b>Acute inhalation toxicity</b> | : LC50 > 10 mg/L     |

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

**Acute dermal toxicity** : LD50 > 5,000 mg/kg

| <b>GHS Properties</b>                              | <b>Classification</b>      | <b>Routes of entry</b>     |
|--|----------------------------|----------------------------|
| Acute toxicity                                     | No classification proposed | Oral                       |
| Acute toxicity                                     | No classification proposed | Dermal                     |
| Acute toxicity                                     | No classification proposed | Inhalation - Dust and Mist |
| Acute toxicity                                     | No classification proposed | Inhalation - Vapour        |
| Acute toxicity                                     | No classification proposed | Inhalation - Gas           |
| Skin corrosion/irritation                          | No classification proposed | -                          |
| Serious eye damage/eye irritation                  | No classification proposed | -                          |
| Skin sensitisation                                 | No classification proposed | -                          |
| Respiratory sensitisation                          | No classification proposed | -                          |
| Germ cell mutagenicity                             | No classification proposed | -                          |
| Carcinogenicity                                    | No classification proposed | -                          |
| Reproductive toxicity                              | No classification proposed | -                          |
| Specific target organ toxicity - single exposure   | No classification proposed | -                          |
| Specific target organ toxicity - repeated exposure | No classification proposed | -                          |
| Aspiration hazard                                  | No classification proposed | -                          |

**Aggravated Medical Condition** : None known.

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

**12. ECOLOGICAL INFORMATION****Product :** The product itself has not been tested.**Toxicity**

The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

**Toxicity to fish**

| Components                              | End point  | Species                                   | Value       | Exposure time |
|---|--|---|-------------|---------------|
| Isobutane                               | LC50<br>QSAR   | Fish                                      | 27.98 mg/l  | 96 h          |
| Alkyl dimethyl benzyl ammonium chloride | LC50<br>Measured<br>OECD<br>Test<br>Guideline<br>203 | Pimephales promelas<br>(fathead minnow)   | 0.28 mg/l   | 96 h          |
|   | NOEC   | Pimephales promelas<br>(fathead minnow)   | 0.03 mg/l   | 34 d          |
| Decyldimethyloctylammonium chloride     | No data available                                    |   |             |               |
| Dimethyldioctylammonium chloride        | semi-static test<br>LC50                             | Lepomis macrochirus<br>(Bluegill sunfish) | 0.28 mg/l   | 96 h          |
|   | flow-through test<br>NOEC                            | Pimephales promelas<br>(fathead minnow)   | 18 mg/l     | 33 d          |
| Didecyldimethylammonium chloride        |  | Pimephales promelas<br>(fathead minnow)   | 0.19 mg/l   | 96 h          |
|   |  | Danio rerio (zebra fish)                  | 0.0322 mg/l | 34 d          |

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

**Toxicity to aquatic invertebrates**

| Components                              | End point                                | Species                    | Value       | Exposure time |
|---|--|----------------------------|-------------|---------------|
| Isobutane                               | LC50<br>QSAR                             | Daphnid                    | 16.33 mg/l  | 48 h          |
| Alkyl dimethyl benzyl ammonium chloride | EC50<br>OECD<br>Test<br>Guideline<br>202 | Daphnia magna (Water flea) | 0.016 mg/l  | 48 h          |
|   | NOEC                                     | Daphnia magna              | 0.0042 mg/l | 21 d          |
| Decyldimethyloctylammonium chloride     | No data available                        |                            |             |               |
| Dimethyldioctylammonium chloride        | static test<br>EC50                      | Daphnia magna (Water flea) | 0.066 mg/l  | 48 h          |
|   | flow-through test<br>NOEC                | Daphnia magna              | 0.027 mg/l  | 21 d          |
| Didecyldimethylammonium chloride        | static test<br>EC50                      | Daphnia magna (Water flea) | 0.029 mg/l  | 48 h          |
|   | NOEC                                     | Daphnia magna              | 0.01 mg/l   | 21 d          |

**Toxicity to aquatic plants**

| Components | End point | Species | Value | Exposure |
|------------|-----------|---------|-------|----------|
|------------|-----------|---------|-------|----------|

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

|  |  |   |            | <b>time</b> |
|--|--|---|------------|-------------|
| Isobutane                                  | EC50<br>QSAR                             | Green algae   | 8.57 mg/l  | 96 h        |
| Alkyl dimethyl benzyl<br>ammonium chloride | EC50<br>OECD<br>Test<br>Guideline<br>201 | Selenastrum<br>capricornutum,<br>Skeletonema costatum | 0.026 mg/l | 72 h        |
| Decyldimethyloctylammonium<br>chloride     | No data<br>available                     |   |            |             |
| Dimethyldioctylammonium<br>chloride        | Static<br>NOEC                           | Desmodesmus<br>subspicatus (green algae)              | 0.015 mg/l | 72 h        |
| Didecyldimethylammonium<br>chloride        | EC50                                     | Selenastrum<br>capricornutum,<br>Skeletonema costatum | 0.026 mg/l | 96 h        |

**Persistence and degradability**

| <b>Component</b>                           | <b>Biodegradation</b> | <b>Exposure<br/>time</b> | <b>Summary</b>         |
|--|-----------------------|--------------------------|------------------------|
| Isobutane                                  | 70 %                  | < 10 d                   | Readily biodegradable. |
| Alkyl dimethyl benzyl<br>ammonium chloride | 95.5 %                | 28 d                     | Readily biodegradable. |
| Decyldimethyloctylammonium<br>chloride     | No data available     |                          |                        |
| Dimethyldioctylammonium<br>chloride        | No data available     |                          |                        |
| Didecyldimethylammonium<br>chloride        | 69 %                  | 28 d                     | Readily biodegradable. |

**Bioaccumulative potential**

| <b>Component</b>                           | <b>Bioconcentration<br/>factor (BCF)</b> | <b>Partition Coefficient n-<br/>Octanol/water (log)</b> |
|--|--|---|
| Isobutane                                  | 1.57 - 1.97                              | 2.8   |
| Alkyl dimethyl benzyl<br>ammonium chloride | 79 Measured                              | 3.91  |
| Decyldimethyloctylammonium<br>chloride     | No data available                        | No data available                                       |

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

|                                  |                   |                   |
|----------------------------------|-------------------|-------------------|
| Dimethyldioctylammonium chloride | No data available | No data available |
| Didecyldimethylammonium chloride | 81 Measured       | 2.58              |

**Mobility**

| Component                               | End point         | Value |
|---|-------------------|-------|
| Isobutane                               | No data available |       |
| Alkyl dimethyl benzyl ammonium chloride | No data available |       |
| Decyldimethyloctylammonium chloride     | No data available |       |
| Dimethyldioctylammonium chloride        | No data available |       |
| Didecyldimethylammonium chloride        |                   | -     |

**PBT and vPvB assessment**

| Component                               | Results                              |
|---|--------------------------------------|
| Isobutane                               | Not fulfilling PBT and vPvB criteria |
| Alkyl dimethyl benzyl ammonium chloride | Not fulfilling PBT and vPvB criteria |
| Decyldimethyloctylammonium chloride     | Not fulfilling PBT and vPvB criteria |
| Dimethyldioctylammonium chloride        | Not fulfilling PBT and vPvB criteria |
| Didecyldimethylammonium chloride        | Not fulfilling PBT and vPvB criteria |

**Other adverse effects** : None known.**13. DISPOSAL CONSIDERATIONS**

Consumer may discard empty container in trash, or recycle where facilities exist.

**Safety Data Sheet**

according to Hazard Communication Standard; 29 CFR 1910.1200

**SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II  
(EPA 89900-2)**

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

**14. TRANSPORT INFORMATION**

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

|  | Land transport   | Sea transport  | Air transport  |
|--|--|--|--|
| UN number  | 1950   | 1950   | 1950   |
| UN proper shipping name  | AEROSOLS, Flammable  | AEROSOLS, Flammable  | AEROSOLS, Flammable  |
| Transport hazard class(es)   | 2.1  | 2  | 2.1  |
| Packing group  | -  | -  | -  |
| Environmental hazards  | -  | -  | -  |
| Special precautions for user   | Limited quantities derogation may be applicable to this product, please check transport documents. | Limited quantities derogation may be applicable to this product, please check transport documents. | Limited quantities derogation may be applicable to this product, please check transport documents. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Product not transported as bulk.   | Product not transported as bulk.   | Product not transported as bulk.   |

**15. REGULATORY INFORMATION****FIFRA Labeling**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

Following is the hazard information as required on the pesticide label:

CAUTION:  
Causes moderate eye irritation.

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

### CONTENTS UNDER PRESSURE.

Exposure to temperatures above 130° F may cause bursting.

Store in a cool dry well-ventilated place.

Do not use or store near heat or open flame.

**Notification status** : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**Notification status** : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

**California Prop. 65** : This product is not subject to the reporting requirements under California's Proposition 65.

## 16. OTHER INFORMATION

### HMIS Ratings

|              |   |
|--------------|---|
| Health       | 1 |
| Flammability | 1 |
| Reactivity   | 0 |

### NFPA Ratings

|            |   |
|------------|---|
| Health     | 1 |
| Fire       | 1 |
| Reactivity | 0 |
| Special    | - |

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

## Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200



# SCRUBBING BUBBLES® DISINFECTANT RESTROOM CLEANER II (EPA 89900-2)

Version 2.3

Print Date 03/18/2020

Revision Date 03/16/2020

SDS Number 350000021325

### Further information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

|             |   |
|-------------|---|
| Prepared by | SC Johnson Global Safety Assessment &<br>Regulatory Affairs (GSARA) |
|-------------|---|

**Section 1: IDENTIFICATION****Product Name:** Simple Green® All-Purpose Cleaner**Additional Names:****Manufacturer's Part Number:** *\*Please refer to Section 16***Recommended Use:** Cleaner & Degreaser for water tolerant surfaces.**Restrictions on Use:** Do not use on non-rinseable surfaces.**Company:** Sunshine Makers, Inc.  
15922 Pacific Coast Highway  
Huntington Beach, CA 92649 USA**Telephone:** 800-228-0709 • 562-795-6000 *Mon – Fri, 8am – 5pm PST***Fax:** 562-592-3830**Email:** [info@simplegreen.com](mailto:info@simplegreen.com)**Emergency Phone:** Chem-Tel 24-Hour Emergency Service: 800-255-3924**Section 2: HAZARDS IDENTIFICATION****This product is not considered hazardous under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).**OSHA HCS 2012Label Elements**Signal Word:** None**Hazard Symbol(s)/Pictogram(s):** None required**Hazard Statements:** None**Precautionary Statements:** None**Hazards Not Otherwise Classified (HNOC):** None**Other Information:** None Known**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

| <u>Ingredient</u>   | <u>CAS Number</u>   | <u>Percent Range</u> |
|---|---------------------|----------------------|
| Water   | 7732-18-5           | > 80.698%*           |
| C9-11 Alcohols Ethoxylated  | 68439-46-3          | < 5.000%*            |
| Surfactant  | Proprietary         | < 5.000%*            |
| Sodium Citrate  | 68-04-2             | < 5.000%*            |
| Sodium Carbonate  | 497-19-8            | < 1.000%*            |
| Tetrasodium Glutamate Diacetate                                     | 51981-21-6          | < 1.000%*            |
| Citric Acid   | 77-92-9             | < 1.000%*            |
| Blend of Polyoxyalkylene Substituted Chromophores (Cyan and Yellow) | Proprietary Mixture | < 0.100%*            |
| Fragrances  | Proprietary Mixture | < 1.000%*            |
| Anethole  | 104-46-1            | < 0.100%*            |
| Eucalyptol  | 470-82-6            | < 0.100%*            |
| Methylchlorisothiazolinone  | 26172-55-4          | < 0.001%*            |
| Methylisothiazolinone   | 2682-20-4           | < 0.0001%*           |

*\*specific percentages of composition are being withheld as a trade secret***Section 4: FIRST-AID MEASURES****Inhalation:** Not expected to cause respiratory irritation. If adverse effect occurs, move to fresh air.**Skin Contact:** Not expected to cause skin irritation. If adverse effect occurs, rinse skin with water.**Eye Contact:** Not expected to cause eye irritation. If adverse effect occurs, flush eyes with water.**Ingestion:** May cause upset stomach. Drink plenty of water to dilute. See section 11.**Most Important Symptoms/Effects, Acute and Delayed:** None known.

**Section 4: FIRST-AID MEASURES - continued**

**Indication of Immediate Medical Attention and Special Treatment Needed, if necessary:** Treat symptomatically

**Section 5: FIRE-FIGHTING MEASURES**

**Suitable & Unsuitable Extinguishing Media:** Use Dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam. Avoid high volume jet water.

**Specific Hazards Arising from Chemical:** In event of fire, fire created carbon oxides may be formed.

**Special Protective Actions for Fire-Fighters:** Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

*This product is non-flammable. See Section 9 for Physical Properties.*

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures:** *For non-emergency and emergency personnel:* See section 8 – personal protection. Avoid eye contact. Safety goggles suggested.

**Environmental Precautions:** Do not allow into open waterways and ground water systems.

**Methods and Materials for Containment and Clean Up:** Dike or soak up with inert absorbent material. See section 13 for disposal considerations.

**Section 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:** Ensure adequate ventilation. Keep out of reach of children. Keep away from heat, sparks, open flame and direct sunlight. Do not pierce any part of the container. Do not mix or contaminate with any other chemical. Do not eat, drink or smoke while using this product.

**Conditions for Safe Storage including Incompatibilities:** Keep container tightly closed. Keep in cool dry area. Avoid prolonged exposure to sunlight. Do not store at temperatures above 109°F (42.7°C). If separation occurs, mix the product for reconstitution.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limit Values:** No components listed with TWA or STEL values under OSHA or ACGIH.

**Appropriate Engineering Controls:** Showers, eyewash stations, ventilation systems

**Individual Protection Measures / Personal Protective Equipment (PPE)**

**Eye Contact:** Use protective glasses or safety goggles if splashing or spray-back is likely.

**Respiratory:** Use in well ventilated areas or local exhaust ventilations when cleaning small spaces.

**Skin Contact:** Use protective gloves (any material) when used for prolonged periods or dermally sensitive.

**General Hygiene Considerations:** Wash thoroughly after handling and before eating or drinking.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

|                                   |                      |  |   |
|-----------------------------------|----------------------|--|---|
| <b>Appearance:</b>                | Green Liquid         | <b>Partition Coefficient: n-octanol/water:</b> | Not determined  |
| <b>Odor:</b>                      | Added sassafras odor | <b>Autoignition Temperature:</b>               | Non-flammable   |
| <b>Odor Threshold:</b>            | Not determined       | <b>Decomposition Temperature:</b>              | 42.7°C (109°F)  |
| <b>pH:</b>                        | 8.5 – 9.2            | <b>Viscosity:</b>                              | Like water  |
| <b>Freezing Point:</b>            | 0-3.33°C (32-38°F)   | <b>Specific Gravity:</b>                       | 1.01 – 1.03   |
| <b>Boiling Point &amp; Range:</b> | 101°C (213.8°F)      | <b>VOCs:</b>                                   | <b>**Water &amp; fragrance exemption in calculation</b> |

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES - continued**

|  |                                 |  |                    |               |       |
|--|---------------------------------|--|--------------------|---------------|-------|
| <b>Flash Point:</b>                                  | > 212°F                         | SCAQMD 304-91 / EPA 24:                | 0 g/L              | 0 lb/gal      | 0%    |
| <b>Evaporation Rate:</b>                             | Not determined                  | CARB Method 310**:                     | < 5 g/L            | <0.0417lb/gal | <0.5% |
| <b>Flammability (solid, gas):</b>                    | Not applicable                  | SCAQMD Method 313:                     | Not tested         |               |       |
| <b>Upper/Lower Flammability or Explosive Limits:</b> | Not applicable                  | <b>VOC Composite Partial Pressure:</b> | Not determined     |               |       |
| <b>Vapor Pressure:</b>                               | 0.60 PSI @77°F, 2.05 PSI @100°F | <b>Relative Density:</b>               | 8.42 – 8.59 lb/gal |               |       |
| <b>Vapor Density:</b>                                | Not determined                  | <b>Solubility:</b>                     | 100% in water      |               |       |

**Section 10: STABILITY AND REACTIVITY**

|  |  |
|--|--|
| <b>Reactivity:</b>                         | Non-reactive.  |
| <b>Chemical Stability:</b>                 | Stable under normal conditions 70°F (21°C) and 14.7 psig (760 mmHg).         |
| <b>Possibility of Hazardous Reactions:</b> | None known.  |
| <b>Conditions to Avoid:</b>                | Excessive heat or cold.  |
| <b>Incompatible Materials:</b>             | Do not mix with oxidizers, acids, bathroom cleaners, or disinfecting agents. |
| <b>Hazardous Decomposition Products:</b>   | Normal products of combustion - CO, CO <sub>2</sub> .                        |

**Section 11: TOXICOLOGICAL INFORMATION**

|                                   |                |  |
|-----------------------------------|----------------|--|
| <b>Likely Routes of Exposure:</b> | Inhalation -   | Overexposure may cause headache.                                       |
|                                   | Skin Contact - | Not expected to cause irritation, repeated contact may cause dry skin. |
|                                   | Eye Contact -  | Not expected to cause irritation.                                      |
|                                   | Ingestion -    | May cause upset stomach.   |

*Symptoms related to the physical, chemical and toxicological characteristics:* no symptoms expected under typical use conditions.

*Delayed and immediate effects and or chronic effects from short term exposure:* no symptoms expected under typical use conditions.

*Delayed and immediate effects and or chronic effects from long term exposure:* headache, dry skin, or skin irritation may occur.

*Interactive effects:* Not known.

Numerical Measures of Toxicity

|   |                                  |                      |
|---|----------------------------------|----------------------|
| <b>Acute Toxicity:</b>  | Oral LD <sub>50</sub> (rat)      | > 5 g/kg body weight |
|   | Dermal LD <sub>50</sub> (rabbit) | > 5 g/kg body weight |
| <i>Calculated via OSHA HCS 2012 / Globally Harmonized System of Classification and Labelling of Chemicals</i> |                                  |                      |

|                                   |  |
|-----------------------------------|--|
| <b>Skin Corrosion/Irritation:</b> | Non-irritant per Dermal Irritation® assay modeling. No animal testing performed. |
| <b>Eye Damage/Irritation:</b>     | Non-irritant per Ocular Irritation® assay modeling. No animal testing performed. |
| <b>Germ Cell Mutagenicity:</b>    | Mixture does not classify under this category.                                   |
| <b>Carcinogenicity:</b>           | Mixture does not classify under this category.                                   |
| <b>Reproductive Toxicity:</b>     | Mixture does not classify under this category.                                   |
| <b>STOT-Single Exposure:</b>      | Mixture does not classify under this category.                                   |
| <b>STOT-Repeated Exposure:</b>    | Mixture does not classify under this category.                                   |
| <b>Aspiration Hazard:</b>         | Mixture does not classify under this category.                                   |

**Section 12: ECOLOGICAL INFORMATION**

|                     |  |
|---------------------|--|
| <b>Ecotoxicity:</b> | Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.  |
| <b>Aquatic:</b>     | Aquatic Toxicity - Low, based on OECD 201, 202, 203 + Microtox: EC <sub>50</sub> & IC <sub>50</sub> ≥100 mg/L. Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals. |
| <b>Terrestrial:</b> | Not tested on finished formulation.  |

**Section 12: ECOLOGICAL INFORMATION - continued**

|                                       |  |
|---------------------------------------|--|
| <b>Persistence and Degradability:</b> | Readily Biodegradable per OCED 301D, Closed Bottle Test. Reaches 100% biodegradation within 60 days. |
| <b>Bioaccumulative Potential:</b>     | No data available.   |
| <b>Mobility in Soil:</b>              | No data available.   |
| <b>Other Adverse Effects:</b>         | No data available.   |

**Section 13: DISPOSAL CONSIDERATIONS**

**Unused or Used Liquid:** May be considered hazardous in your area depending on usage and tonnage of disposal – check with local, regional, and or national regulations for appropriate methods of disposal.

**Empty Containers:** May be offered for recycling.

Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

**Section 14: TRANSPORT INFORMATION**

|   |                               |
|---|-------------------------------|
| <b>U.N. Number:</b>   | Not applicable                |
| <b>U.N. Proper Shipping Name:</b>   | Cleaning Compound, Liquid NOI |
| <b>Transport Hazard Class(es):</b>  | Not applicable                |
| <b>Packing Group:</b>   | Not applicable                |
| <b>Environmental Hazards:</b>   | Marine Pollutant - NO         |
| <b>Transport in Bulk (according to Annex II of MARPOL 73/78 and IBC Code):</b>  | Unknown.                      |
| <b>Special precautions which user needs to be aware of/comply with, in connection with transport or conveyance either within or outside their premises:</b> | None known.                   |

|                                   |                             |                    |                             |
|-----------------------------------|-----------------------------|--------------------|-----------------------------|
| <b>U.S. (DOT) / Canadian TDG:</b> | Not Regulated for shipping. | <b>ICAO/ IATA:</b> | Not classified as Hazardous |
| <b>IMO / IDMG:</b>                | Not classified as Hazardous | <b>ADR/RID:</b>    | Not classified as Hazardous |

**Section 15: REGULATORY INFORMATION**

**All components are listed on:** TSCA and DSL Inventory.

**SARA Title III:** Sections 311/312 Hazard Categories – Not applicable.  
Sections 313 Superfunds Amendments and Reauthorizations Act of 1986 – Not applicable.  
Sections 302 – Not applicable.

**Clean Air Act (CAA):** Not applicable

**Clean Water Act (CWA):** Not applicable

**State Right To Know Lists:** No ingredients listed

**California Proposition 65:** No ingredients listed

This product has been classified as “not classifiable as hazardous” in accordance with Consumer Product Safety Commission (16 CFR Chapter 2) and labelled and packaged accordingly.

**US Consumer Product Safety Commission Regulations**

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). However, the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. Therefore, the requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC, and this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

**Section 16: OTHER INFORMATION**

| <u>Size</u>  | <u>UPC</u>   | <u>Size</u>                     | <u>UPC</u>   |
|--------------|--------------|---------------------------------|--------------|
| 2 fl. oz.    | 043318131035 | 67.6 fl. oz.                    | 043318000393 |
| 4 fl. oz.    | 043318130014 | 67.6 fl. oz. w/ dilution bottle | 043318005442 |
| 16 fl. oz.   | 043318130021 | 140 fl. oz.                     | 043318001390 |
| 22 fl. oz.   | 043318130229 | 140 fl. oz. w/ dilution bottle  | 043318001468 |
| 24 fl. oz.   | 043318006241 | 1 gallon                        | 043318000799 |
| 24 fl. oz.   | 043318130137 | 1 gallon                        | 043318004957 |
| 32 fl. oz.   | 043318000652 | 1 gallon                        | 043318130052 |
| 32 fl. oz.   | 043318002557 | 1 gallon w/ dilution bottle     | 043318480416 |
| 32 fl. oz.   | 043318130335 | 1 gallon w/ dilution bottle     | 043318480492 |
| 67.6 fl. oz. | 043318130144 | 2.5 gallon                      | 043318004889 |

USA items listed only. Not all items listed. USA items may not be valid for international sale.

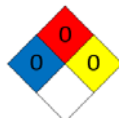
**NFPA:**

Health – None

Flammability – Non-flammable

Stability – Stable

Special - None

**Acronyms**

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

TSCA Toxic Substances Control Act

IARC International Agency for Research on Cancer

CPSC Consumer Product Safety Commission

DSL Domestic Substances List

**Prepared / Revised By:** Sunshine Makers, Inc., Regulatory Department.

**This SDS has been revised in the following sections:** Aligned Section 3 with California Ingredient Disclosure and minor fixes.

**DISCLAIMER:** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** SPRAYWAY GLASS CLEANER

**Other means of identification**

**SDS number:** RE1000000075

**Recommended restrictions**

**Product use:** Cleaner

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

**Manufacturer**

**Company Name:** Sprayway, Inc.  
**Address:** 1000 INTEGRAM DR.  
Pacific, MO 63069  
**Telephone:** 1-630-628-3000  
**Fax:**

**Emergency telephone number:** 1-866-836-8855

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Gases under pressure

Compressed gas

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Warning

**Hazard Statement:** Contains gas under pressure; may explode if heated.

**Precautionary Statements**

**Storage:** Protect from sunlight. Store in a well-ventilated place.

**Hazard(s) not otherwise classified (HNOC):** None.



### 3. Composition/information on ingredients

#### Mixtures

| Chemical Identity  | CAS number | Content in percent (%)* |
|--------------------|------------|-------------------------|
| Ethanol            | 64-17-5    | 1 - <5%                 |
| Ethanol, 2-butoxy- | 111-76-2   | 1 - <5%                 |
| Propane            | 74-98-6    | 1 - <5%                 |
| Butane             | 106-97-8   | 1 - <5%                 |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

|                      |   |
|----------------------|---|
| <b>Ingestion:</b>    | Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.  |
| <b>Inhalation:</b>   | Move to fresh air.  |
| <b>Skin Contact:</b> | Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.  |
| <b>Eye contact:</b>  | Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention. |

#### Most important symptoms/effects, acute and delayed

|                  |                    |
|------------------|--------------------|
| <b>Symptoms:</b> | No data available. |
| <b>Hazards:</b>  | No data available. |

#### Indication of immediate medical attention and special treatment needed

|                   |                    |
|-------------------|--------------------|
| <b>Treatment:</b> | No data available. |
|-------------------|--------------------|

### 5. Fire-fighting measures

|                              |   |
|------------------------------|---|
| <b>General Fire Hazards:</b> | Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk. |
|------------------------------|---|

#### Suitable (and unsuitable) extinguishing media

|                                      |   |
|--------------------------------------|---|
| <b>Suitable extinguishing media:</b> | Use fire-extinguishing media appropriate for surrounding materials. |
|--------------------------------------|---|

|  |  |
|--|--|
| <b>Unsuitable extinguishing media:</b> | Do not use water jet as an extinguisher, as this will spread the fire. |
|--|--|

|  |  |
|--|--|
| <b>Specific hazards arising from the chemical:</b> | Pressurized container may explode when exposed to heat or flame. |
|--|--|

#### Special protective equipment and precautions for firefighters

|  |                    |
|--|--------------------|
| <b>Special fire fighting procedures:</b> | No data available. |
|--|--------------------|



**Special protective equipment for fire-fighters:**

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**

No data available.

**Methods and material for containment and cleaning up:**

Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

**Environmental Precautions:**

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

## 7. Handling and storage

**Precautions for safe handling:**

Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:**

Protect from sunlight. Store in a cool place. Aerosol Level 1

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

| Chemical Identity  | Type | Exposure Limit Values             | Source  |
|--------------------|------|-----------------------------------|---|
| Ethanol            | REL  | 1,000 ppm 1,900 mg/m <sup>3</sup> | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | PEL  | 1,000 ppm 1,900 mg/m <sup>3</sup> | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
|                    | TWA  | 1,000 ppm 1,900 mg/m <sup>3</sup> | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|                    | STEL | 1,000 ppm                         | US. ACGIH Threshold Limit Values (2009)                                     |
| Ethanol, 2-butoxy- | TWA  | 20 ppm                            | US. ACGIH Threshold Limit Values (2008)                                     |
|                    | REL  | 5 ppm 24 mg/m <sup>3</sup>        | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | PEL  | 50 ppm 240 mg/m <sup>3</sup>      | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
|                    | TWA  | 25 ppm 120 mg/m <sup>3</sup>      | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
| Propane            | REL  | 1,000 ppm 1,800 mg/m <sup>3</sup> | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | PEL  | 1,000 ppm 1,800 mg/m <sup>3</sup> | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
|                    | TWA  | 1,000 ppm 1,800 mg/m <sup>3</sup> | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|                    | STEL | 1,000 ppm                         | US. ACGIH Threshold Limit Values (03 2018)                                  |
| Butane             | REL  | 800 ppm 1,900 mg/m <sup>3</sup>   | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | STEL | 1,000 ppm                         | US. ACGIH Threshold Limit Values (03 2018)                                  |
|                    | TWA  | 800 ppm 1,900 mg/m <sup>3</sup>   | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|                    | TWA  | 20 ppm                            | US. ACGIH Threshold Limit Values (2008)                                     |
| Morpholine         | REL  | 20 ppm 70 mg/m <sup>3</sup>       | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | STEL | 30 ppm 105 mg/m <sup>3</sup>      | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|                    | TWA  | 20 ppm                            | US. ACGIH Threshold Limit Values (2008)                                     |
|                    | TWA  | 20 ppm 70 mg/m <sup>3</sup>       | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|                    | STEL | 30 ppm 105 mg/m <sup>3</sup>      | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |



|  |      |         |  |   |
|--|------|---------|--|---|
|  | PEL  | 20 ppm  | 70 mg/m3                                       | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| 2-Propanol, 2-methyl-  | STEL | 150 ppm | 450 mg/m3                                      | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|  | TWA  | 100 ppm | 300 mg/m3                                      | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|  | PEL  | 100 ppm | 300 mg/m3                                      | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
|  | TWA  | 100 ppm |  | US. ACGIH Threshold Limit Values (2008)                                     |
|  | STEL | 150 ppm | 450 mg/m3                                      | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|  | REL  | 100 ppm | 300 mg/m3                                      | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
| Silica   | REL  |         | 6 mg/m3  | US. NIOSH: Pocket Guide to Chemical Hazards (2005)                          |
|  | TWA  |         | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                |
|  | TWA  |         | 6 mg/m3  | US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)                              |
|  | TWA  |         | 0.8 mg/m3                                      | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)                                |
| 2,6-Octadienal, 3,7-dimethyl-<br>- Inhalable fraction and vapor. | TWA  | 5 ppm   |  | US. ACGIH Threshold Limit Values (01 2010)                                  |

#### Biological Limit Values

| Chemical Identity   | Exposure Limit Values          | Source              |
|---|--------------------------------|---------------------|
| Ethanol, 2-butoxy- (Butoxyacetic acid (BAA), with hydrolysis: Sampling time: End of shift.) | 200 mg/g (Creatinine in urine) | ACGIH BEL (03 2013) |

#### Appropriate Engineering Controls

No data available.

#### Individual protection measures, such as personal protective equipment

**General information:** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection:** Wear goggles/face shield.

#### Skin Protection

**Hand Protection:** No data available.

**Other:** No data available.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices.

### 9. Physical and chemical properties

#### Appearance

**Physical state:** liquid  
**Form:** Spray Aerosol  
**Color:** No data available.  
**Odor:** No data available.  
**Odor threshold:** No data available.  
**pH:** 8.7 - 9.7  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.



|  |                           |
|--|---------------------------|
| Flash Point:   | Not applicable            |
| Evaporation rate:  | No data available.        |
| Flammability (solid, gas):                                   | Non-flammable Aerosol     |
| <b>Upper/lower limit on flammability or explosive limits</b> |                           |
| Flammability limit - upper (%):                              | No data available.        |
| Flammability limit - lower (%):                              | No data available.        |
| Explosive limit - upper (%):                                 | No data available.        |
| Explosive limit - lower (%):                                 | No data available.        |
| Vapor pressure:  | 5,515 - 6,894 hPa (20 °C) |
| Vapor density:   | No data available.        |
| Density:   | No data available.        |
| Relative density:  | No data available.        |
| <b>Solubility(ies)</b>                                       |                           |
| Solubility in water:   | No data available.        |
| Solubility (other):  | No data available.        |
| Partition coefficient (n-octanol/water):                     | No data available.        |
| Auto-ignition temperature:                                   | No data available.        |
| Decomposition temperature:                                   | No data available.        |
| Viscosity:   | No data available.        |

## 10. Stability and reactivity

|                                     |   |
|-------------------------------------|---|
| Reactivity:                         | No data available.                          |
| Chemical Stability:                 | Material is stable under normal conditions. |
| Possibility of hazardous reactions: | No data available.                          |
| Conditions to avoid:                | Avoid heat or contamination.                |
| Incompatible Materials:             | No data available.                          |
| Hazardous Decomposition Products:   | No data available.                          |

## 11. Toxicological information

### Information on likely routes of exposure

|               |                    |
|---------------|--------------------|
| Inhalation:   | No data available. |
| Skin Contact: | No data available. |
| Eye contact:  | No data available. |
| Ingestion:    | No data available. |

### Symptoms related to the physical, chemical and toxicological characteristics

|               |                    |
|---------------|--------------------|
| Inhalation:   | No data available. |
| Skin Contact: | No data available. |
| Eye contact:  | No data available. |



**Ingestion:** No data available.

#### Information on toxicological effects

##### Acute toxicity (list all possible routes of exposure)

**Oral**  
**Product:** ATEmix: 36,844.23 mg/kg

**Dermal**  
**Product:** ATEmix: 32,120.9 mg/kg

**Inhalation**  
**Product:** ATEmix: 690.87 mg/l  
ATEmix : 172.72 mg/l

**Repeated dose toxicity**  
**Product:** No data available.

**Specified substance(s):**  
Ethanol NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result, Key study  
Ethanol, 2-butoxy- NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation Experimental result, Key study  
NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key study  
NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal Experimental result, Key study  
Propane NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study  
LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study  
Butane LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study  
NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study

**Skin Corrosion/Irritation**  
**Product:** No data available.

**Specified substance(s):**  
Ethanol in vivo (Rabbit): Not irritant Experimental result, Key study  
Ethanol, 2-butoxy- in vivo (Rabbit): Irritating Experimental result, Key study

**Serious Eye Damage/Eye Irritation**  
**Product:** No data available.

**Specified substance(s):**  
Ethanol Rabbit, 1 - 24 hrs: Not irritating  
Ethanol, 2-butoxy- Rabbit, 24 - 72 hrs: Irritating

**Respiratory or Skin Sensitization**  
**Product:** No data available.

**Specified substance(s):**  
Ethanol Skin sensitization:, in vivo (Guinea pig): Non sensitising  
Ethanol, 2-butoxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising

**Carcinogenicity**  
**Product:** No data available.



**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No data available.

**In vivo**

**Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Specified substance(s):**

Ethanol LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study

Ethanol, 2-butoxy- LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key study

Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Ethanol LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study

Ethanol, 2-butoxy- EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study

Butane LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study

## Chronic hazards to the aquatic environment:

### Fish

**Product:** No data available.

### Specified substance(s):

Ethanol NOAEL (Oryzias latipes): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study

Ethanol, 2-butoxy- NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

### Aquatic Invertebrates

**Product:** No data available.

### Specified substance(s):

Ethanol LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study  
NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study

Ethanol, 2-butoxy- EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study  
EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study

### Toxicity to Aquatic Plants

**Product:** No data available.

## Persistence and Degradability

### Biodegradation

**Product:** No data available.

### Specified substance(s):

Ethanol 95 % Detected in water. Experimental result, Key study

Ethanol, 2-butoxy- 90.4 % Detected in water. Experimental result, Key study

Propane 100 % (385.5 h) Detected in water. Experimental result, Key study  
50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study

### BOD/COD Ratio

**Product:** No data available.

## Bioaccumulative potential

### Bioconcentration Factor (BCF)

**Product:** No data available.

### Specified substance(s):

Ethanol Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study

## Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** No data available.



#### Known or predicted distribution to environmental compartments

|                    |                    |
|--------------------|--------------------|
| Ethanol            | No data available. |
| Ethanol, 2-butoxy- | No data available. |
| Propane            | No data available. |
| Butane             | No data available. |

**Other adverse effects:** No data available.

### 13. Disposal considerations

**Disposal instructions:** Wash before disposal. Dispose to controlled facilities.

**Contaminated Packaging:** No data available.

### 14. Transport information

#### DOT

|                               |                         |
|-------------------------------|-------------------------|
| UN Number:                    | UN 1950                 |
| UN Proper Shipping Name:      | Aerosols, non-flammable |
| Transport Hazard Class(es)    |                         |
| Class:                        | 2.2                     |
| Label(s):                     | —                       |
| Packing Group:                | II                      |
| Marine Pollutant:             | No                      |
| Environmental Hazards:        | No                      |
| Marine Pollutant              | No                      |
| Special precautions for user: | Not regulated.          |

#### IMDG

|                               |                         |
|-------------------------------|-------------------------|
| UN Number:                    | UN 1950                 |
| UN Proper Shipping Name:      | Aerosols, non-flammable |
| Transport Hazard Class(es)    |                         |
| Class:                        | 2                       |
| Label(s):                     | —                       |
| EmS No.:                      |                         |
| Packing Group:                | —                       |
| Environmental Hazards:        | No                      |
| Marine Pollutant              | No                      |
| Special precautions for user: | Not regulated.          |

#### IATA

|                               |                         |
|-------------------------------|-------------------------|
| UN Number:                    | UN 1950                 |
| Proper Shipping Name:         | Aerosols, non-flammable |
| Transport Hazard Class(es):   |                         |
| Class:                        | 2.2                     |
| Label(s):                     | —                       |
| Packing Group:                | —                       |
| Environmental Hazards:        | No                      |
| Marine Pollutant              | No                      |
| Special precautions for user: | Not regulated.          |
| Cargo aircraft only:          | Allowed.                |



## 15. Regulatory information

### US Federal Regulations

**Restrictions on use:** Not known.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

### CERCLA Hazardous Substance List (40 CFR 302.4):

| <u>Chemical Identity</u>        | <u>Reportable quantity</u> |
|---------------------------------|----------------------------|
| Ethanol                         | lbs. 100                   |
| Propane                         | lbs. 100                   |
| Butane                          | lbs. 100                   |
| Morpholine                      | lbs. 100                   |
| Nitrous acid, sodium salt (1:1) | lbs. 100                   |
| 2-Propanol, 2-methyl-           | lbs. 100                   |

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Not listed.

#### SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

#### SARA 304 Emergency Release Notification

| <u>Chemical Identity</u>        | <u>Reportable quantity</u> |
|---------------------------------|----------------------------|
| Ethanol                         | lbs. 100                   |
| Ethanol, 2-butoxy-              |                            |
| Propane                         | lbs. 100                   |
| Butane                          | lbs. 100                   |
| Morpholine                      | lbs. 100                   |
| Nitrous acid, sodium salt (1:1) | lbs. 100                   |
| 2-Propanol, 2-methyl-           | lbs. 100                   |

#### SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u>        | <u>Threshold Planning Quantity</u> |
|---------------------------------|------------------------------------|
| Ethanol                         | 10000 lbs                          |
| Ethanol, 2-butoxy-              | 10000 lbs                          |
| Propane                         | 10000 lbs                          |
| Butane                          | 10000 lbs                          |
| Morpholine                      | 10000 lbs                          |
| Nitrous acid, sodium salt (1:1) | 10000 lbs                          |
| 2-Propanol, 2-methyl-           | 10000 lbs                          |
| Silica                          | 10000 lbs                          |
| 2,6-Octadienal, 3,7-dimethyl-   | 10000 lbs                          |

#### SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> | <u>Reporting threshold for other users</u> | <u>Reporting threshold for manufacturing and processing</u> |
|--------------------------|--|---|
| Ethanol, 2-butoxy-       | N230 lbs                                   | N230 lbs.   |



---

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)  
US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**US. New Jersey Worker and Community Right-to-Know Act**

**Chemical Identity**

Ethanol  
Ethanol, 2-butoxy-  
Propane  
Butane

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

Ethanol  
Ethanol, 2-butoxy-  
Propane  
Butane

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**International regulations**

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

**Inventory Status:**

|  |  |
|--|--|
| Australia AICS:                          | On or in compliance with the inventory |
| Canada DSL Inventory List:               | On or in compliance with the inventory |
| Canada NDSL Inventory:                   | Not in compliance with the inventory.  |
| Ontario Inventory:                       | On or in compliance with the inventory |
| China Inv. Existing Chemical Substances: | On or in compliance with the inventory |
| Japan (ENCS) List:                       | On or in compliance with the inventory |
| Japan ISHL Listing:                      | Not in compliance with the inventory.  |
| Japan Pharmacopoeia Listing:             | Not in compliance with the inventory.  |
| Korea Existing Chemicals Inv. (KECI):    | Not in compliance with the inventory.  |
| Mexico INSQ:                             | Not in compliance with the inventory.  |
| New Zealand Inventory of Chemicals:      | Not in compliance with the inventory.  |
| Philippines PICCS:                       | Not in compliance with the inventory.  |
| Taiwan Chemical Substance Inventory:     | On or in compliance with the inventory |
| US TSCA Inventory:                       | On or in compliance with the inventory |
| EINECS, ELINCS or NLP:                   | Not in compliance with the inventory.  |

**16. Other information, including date of preparation or last revision**

**Issue Date:** 03/18/2020

**Revision Information:** No data available.

**Version #:** 2.0

**Further Information:** No data available.

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.



## Safety Data Sheet

### 1 - Identification

|  |   |
|--|---|
| <b>Product Name:</b> 3-IN-ONE® All-Temp Silicone | <b>Manufacturer:</b> WD-40 Company  |
| <b>Product Use:</b> Lubricant, Protectant        | <b>Address:</b> 9715 Businesspark Avenue<br>San Diego, California, USA<br>92131           |
| <b>Restrictions on Use:</b> None identified      | <b>Telephone:</b>   |
| <b>SDS Date Of Preparation:</b> July 18, 2018    | <b>Emergency:</b> 1-888-324-7596  |
|  | <b>Information:</b> 1-888-324-7596  |
|  | <b>Chemical Spills:</b> 1-800-424-9300 (Chemtrec)<br>1-703-527-3887 (International Calls) |

### 2 – Hazards Identification

#### Hazcom 2012/GHS Classification:

Flammable Liquid Category 4

Aspiration Toxicity Category 1

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

#### Label Elements:



#### DANGER!

Combustible Liquid.

May be fatal if swallowed and enters airways.

#### Prevention

Keep away from flames and hot surfaces. -No smoking.

Wear protective gloves.

#### Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish.

#### Storage

Store in a well-ventilated place. Keep cool.

Store locked up.

#### Disposal

Dispose of contents and container in accordance with local and national regulations.

### 3 - Composition/Information on Ingredients

| Ingredient                | CAS #      | Weight Percent | US Hazcom 2012/ GHS Classification                            |
|---------------------------|------------|----------------|---|
| LVP Aliphatic Hydrocarbon | 64742-47-8 | 85-95%         | Flammable Liquid Category 4<br>Aspiration Toxicity Category 1 |
| Poly(dimethylsiloxane)    | 63148-62-9 | 1-5%           | Not Hazardous   |

Note: The exact percentages are a trade secret.

#### 4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Signs and Symptoms of Exposure:** Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye irritation.

**Indication of Immediate Medical Attention/Special Treatment Needed:** Immediate medical attention is needed for ingestion.

#### 5 – Fire Fighting Measures

**Suitable (and unsuitable) Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Specific Hazards Arising from the Chemical:** Combustible liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.

#### 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

**Methods and Materials for Containment/Cleanup:** Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

#### 7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class IIIA Liquid.

#### 8 – Exposure Controls/Personal Protection

| Chemical                                      | Occupational Exposure Limits                          |
|---|---|
| LVP Petroleum Distillates, hydrotreated light | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended) |
| Poly(dimethylsiloxane)                        | None Established                                      |

##### The Following Controls are Recommended for Normal Consumer Use of this Product

**Appropriate Engineering Controls:** Use in a well-ventilated area.

**Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact.

**Skin Protection:** Avoid prolonged skin contact.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

##### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

**Personal Protection:**

**Eye Protection:** Safety goggles recommended where eye contact is possible.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

### 9 – Physical and Chemical Properties

|                            |                                  |   |                            |
|----------------------------|----------------------------------|---|----------------------------|
| Appearance:                | Light brown liquid               | Flammable Limits:<br>(Solvent Portion)      | LEL: 0.6% UEL: 5.0%        |
| Odor:                      | Mild odor                        | Vapor Pressure:                             | 0.07 mmHg @ 68°F<br>(20°C) |
| Odor Threshold:            | Not established                  | Vapor Density:                              | Greater than 1 (air=1)     |
| pH:                        | Not Applicable                   | Relative Density:                           | 0.76-0.84                  |
| Melting/Freezing Point:    | Not established                  | Solubilities:                               | Insoluble in water         |
| Boiling Point/Range:       | 430 - 520°F (221 -<br>271°C)     | Partition Coefficient; n-<br>octanol/water: | Not established            |
| Flash Point:               | 191°F (88.3°C) Tag<br>Closed Cup | Autoignition<br>Temperature:                | Not established            |
| Evaporation Rate:          | Not established                  | Decomposition<br>Temperature:               | Not established            |
| Flammability (solid, gas): | Not Applicable                   | Viscosity:                                  | 3.8 cSt @ 104°F (40°C)     |
| VOC:                       | <7.64-8.4 g/L (<1%)              | Pour Point:                                 | -39°C (-38°F )             |

### 10 – Stability and Reactivity

**Reactivity:** Not reactive under normal conditions

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** May react with strong oxidizers generating heat.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

### 11 – Toxicological Information

**Symptoms of Overexposure:**

**Inhalation:** High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

**Skin Contact:** Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

**Eye Contact:** Contact may be irritating to eyes. May cause redness and tearing.

**Ingestion:** This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

**Chronic Effects:** None expected.

**Carcinogen Status:** None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

**Reproductive Toxicity:** None of the components is considered a reproductive hazard.

**Numerical Measures of Toxicity:**

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg and the dermal toxicity greater than 2000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

### 12 – Ecological Information

**Ecotoxicity:** LVP Petroleum Distillates, hydrotreated light and poly(dimethylsiloxane) are not expected to be harmful to aquatic organisms.

**Persistence and Degradability:** LVP Petroleum Distillates, hydrotreated light) is expected to be readily biodegradable.  
**Bioaccumulative Potential:** Bioaccumulation is not expected based on an assessment of the ingredients.  
**Mobility in Soil:** No data available  
**Other Adverse Effects:** None known

### 13 - Disposal Considerations

If this product becomes a waste, it would not be expected to meet the criteria of a RCRA hazardous waste. However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

### 14 – Transportation Information

DOT Surface Shipping Description: Excepted from Hazmat (49CFR 173.150 (F)) in non-bulk packagings  
Bulk Packagings: NA1993, Combustible Liquid, n.o.s. (contains Petroleum Distillates), PG III  
IMDG Shipping Description: Not Regulated  
ICAO Shipping Description: Not Regulated

NOTE: WD-40 Company does not test containers to assure that they can withstand the pressure change without leakage when transported by air. We do not recommend that our products be transported by air unless a specific review is conducted.

### 15 – Regulatory Information

#### U.S. Federal Regulations:

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

#### SARA TITLE III:

**Hazard Category For Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III  
Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):** This product does not require a California Proposition 65 warning.

**VOC Regulations:** This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

**Canadian Environmental Protection Act:** One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

### 16 – Other Information

#### HMIS Hazard Rating:

**Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Physical Hazard – 0 (minimal hazard)**

Revision Date: July 18, 2018

Supersedes: April 4, 2018

Revision Summary: Address and telephone number update in Section 1.

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed By: I. Kowalski

Regulatory Affairs Manager

1080200/No.0082904

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA &amp; 2001/58/EC standards.

Revision 1.1

11/01/06

## 1. PRODUCT IDENTIFICATION

|     |                         |   |
|-----|-------------------------|---|
| 1.1 | Product Name:           | <b>303 AEROSPACE PROTECTANT™</b>                      |
| 1.2 | Chemical Name:          | See ingredients listed in section 2                   |
| 1.3 | Synonyms:               | None reported by the manufacturer                     |
| 1.4 | Trade Names:            | 303 AEROSPACE PROTECTANT                              |
| 1.5 | Product Use:            | Protectant  |
| 1.6 | Manufacturer's Name:    | 303 Products, Inc.                                    |
| 1.7 | Manufacturer's Address: | 10801 Starwood Drive, Palo Cedro, CA 96073            |
| 1.8 | Business Phone:         | +1 (530) 549-5617                                     |
| 1.9 | Emergency Phone:        | <b>CHEMTREC +1 (800) 424-9300 / +1 (703) 527-3887</b> |

## CHEMICAL RESPONSE CARD:

RESPONSE  
TEAM PPE:

WHMIS:

HEALTH:

1

FLAMMABILITY:

0

REACTIVITY:

0

PERSONAL PROTECTION:

B

## 2. IDENTIFICATION OF RISKS

|     |                           |  |                             |                       |
|-----|---------------------------|--|-----------------------------|-----------------------|
| 2.1 | Hazard Identification:    | This product is not classified as a hazardous substance or as dangerous goods according to the classification criteria of NOHSC and the ADG Code (Australia). In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from CHEMTREC or the U.S. manufacturer, and show them this Material Safety Data Sheet. |                             |                       |
| 2.2 | Routes of Entry:          | <b>INHALATION:</b> NO  | <b>SKIN &amp; EYES:</b> YES | <b>INGESTION:</b> YES |
| 2.3 | Effects of Exposure:      | <b>EYES:</b> Possible irritation and burning sensation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash).<br><b>INGESTION:</b> Possible gastrointestinal irritation, nausea, vomiting or diarrhea.<br><b>INHALATION:</b> No adverse health effects expected.  |                             |                       |
| 2.4 | Symptoms of Exposure:     | <b>EYES:</b> Irritation and burning sensation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash), characterized by red, dry, itching skin.<br><b>INGESTION:</b> Gastrointestinal discomfort, nausea, vomiting, and headache.<br><b>INHALATION:</b> No adverse health effects expected.   |                             |                       |
| 2.5 | Acute Health Effects:     | <b>EYES:</b> Irritation.<br><b>SKIN:</b> Possible irritation and dermatitis (rash).<br><b>INGESTION:</b> Possible gastrointestinal irritation, nausea, vomiting or diarrhea.<br><b>INHALATION:</b> No adverse health effects expected.   |                             |                       |
| 2.6 | Chronic Health Effects:   | None known.  |                             |                       |
| 2.7 | Target Organs:            | None reported by the manufacturer.   |                             |                       |
| 2.8 | Toxicological Properties: | None reported by the manufacturer.   |                             |                       |

## 3. COMPOSITION &amp; INGREDIENTS

| COMPOSITION  | CAS No. | RTECs No. | EINECS No. | %  | EXPOSURE LIMITS IN AIR (mg/m <sup>3</sup> ) |      |            |      |        |
|--------------|---------|-----------|------------|----|---|------|------------|------|--------|
|              |         |           |            |    | ACGIH - ppm                                 |      | OSHA - ppm |      | OTHERS |
|              |         |           |            |    | TLV   | STEL | PEL        | STEL |        |
| Trade Secret | NA      | NA        | NA         | NA | NA  | NA   | NA         | NA   | NA     |
|              |         |           |            |    |   |      |            |      |        |

## 4. FIRST AID

|     |  |   |
|-----|--|---|
| 4.1 | First Aid:                                 | <b>EYES:</b> Flush eyes thoroughly with copious amounts of water for at least 20 minutes, holding eyelids open to ensure complete flushing. If irritation persists, contact a physician.<br><b>SKIN:</b> Wash affected areas with soap and water. If irritation persists, contact a physician. Launder clothing before reuse.<br><b>INGESTION:</b> If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.<br><b>INHALATION:</b> Remove victim to fresh air at once. |
| 4.2 | Medical Conditions Aggravated by Exposure: | None known.   |

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA &amp; 2001/58/EC standards.

Revision 1.1

11/01/06

**5. FIRE & EXPLOSION HAZARDS**

|     |                           |  |                |                              |                |
|-----|---------------------------|--|----------------|------------------------------|----------------|
| 5.1 | Flashpoint & Method:      | Not flammable.   |                |                              |                |
| 5.2 | Autoignition Temperature: | Not Applicable   |                |                              |                |
| 5.3 | Flammability Limits:      | Lower Explosive Limit (LEL):   | Not Applicable | Upper Explosive Limit (UEL): | Not Applicable |
| 5.4 | Fire & Explosion Hazards: | None known.  |                |                              |                |
| 5.5 | Extinguishing Methods:    | CO <sub>2</sub> , sand, dry chemical or other approved fire extinguishing media, foam, and indirect water spray or fog.  |                |                              |                |
| 5.6 | Firefighting Procedures:  | Poses no unusual fire or explosion hazard. Keep containers cool until well after the fire is out. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters should wear full-face, self-contained breathing apparatus (MSHA/NIOSH approved or the equivalent) and impervious clothing. |                |                              |                |

**6. SPILLS & LEAKS**

|     |         |  |
|-----|---------|--|
| 6.1 | Spills: | Secure spill area and maximize ventilation. Stop spill or leak at source if safely possible. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective equipment. Recover free liquid or cover with inert absorbent material and place into appropriate container(s) for disposal. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers or any natural waterway or drinking supply. |
|-----|---------|--|

**7. STORAGE & HANDLING**

|     |                           |   |
|-----|---------------------------|---|
| 7.1 | Work & Hygiene Practices: | Use normal hygiene practices. Avoid breathing vapors. Avoid direct skin contact. Wash hands thoroughly after using this product and before eating, drinking, or smoking.                                |
| 7.2 | Storage & Handling:       | Use and store in a cool, dry, well-ventilated area. Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Do not store in unmarked containers or storage devices. |
| 7.3 | Special Precautions:      | Readily available emergency fire, first aid, and spill response equipment and/or measures are highly recommended.   |

**8. EXPOSURE CONTROL & PERSONAL PROTECTION**

|     |                                     |   |
|-----|-------------------------------------|---|
| 8.1 | Ventilation & Engineering Controls: | General mechanical ventilation is sufficient for use with this product. Local exhaust is recommended in enclosed or confined spaces.                |
| 8.2 | Respiratory Protection:             | A respiratory protection program that meets ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.       |
| 8.3 | Eye Protection:                     | Safety glasses with side shields should be used with this product. If splashing is anticipated, splash goggles and a faceshield are recommended.    |
| 8.4 | Hand Protection:                    | Where contact is likely, impervious gloves are recommended. Do not wear rings, watches, or jewelry that could entrap the material against the skin. |
| 8.5 | Body Protection:                    | None required under normal conditions.  |



# MATERIAL SAFETY DATA SHEET

Page 3 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 9. PHYSICAL & CHEMICAL PROPERTIES

|      |                                     |                              |
|------|-------------------------------------|------------------------------|
| 9.1  | Density:                            | 1.01 - 1.02                  |
| 9.2  | Boiling Point:                      | $\geq 100^{\circ}\text{C}$   |
| 9.3  | Melting Point:                      | $\leq 1.0^{\circ}\text{C}$   |
| 9.4  | Evaporation Rate:                   | $\leq 1.0$ (water = 1)       |
| 9.5  | Vapor Pressure @ 20°C:              | 17 mm Hg                     |
| 9.6  | Molecular Weight:                   | Not Available                |
| 9.7  | Appearance & Colour:                | Milky, white liquid          |
| 9.8  | Odour Threshold:                    | Mild odor                    |
| 9.9  | Solubility:                         | Fully soluble                |
| 9.10 | pH:                                 | 9.79                         |
| 9.11 | Viscosity:                          | Not Available                |
| 9.12 | Coefficient Oil/Water Distribution: | Not Available                |
| 9.13 | Additional Information:             | Vapor density 3.2 (Air =1.0) |

## 10. STABILITY & REACTIVITY

|      |                          |   |
|------|--------------------------|---|
| 10.1 | Stability:               | Stable under normal conditions.   |
| 10.2 | Decomposition Products:  | Heat and carbon dioxide.  |
| 10.3 | Polymerization:          | Will not occur.   |
| 10.4 | Conditions to Avoid:     | Close proximity to incompatible substances (e.g., alkalis, strong oxidizers). |
| 10.5 | Incompatible Substances: | None reported by the manufacturer.  |

## 11. TOXICOLOGICAL INFORMATION

|      |                              |   |
|------|------------------------------|---|
| 11.1 | Toxicity Data:               | No general or specific toxicity data has been reported by the manufacturer other than the information presented in Section 2. However, good personal hygiene practices, such as washing any skin contact areas and removing contaminated clothing, are recommended. |
| 11.2 | Acute Toxicity:              | See section 2.5   |
| 11.3 | Chronic Toxicity:            | See section 2.6   |
| 11.4 | Suspected Carcinogen:        | No  |
| 11.5 | Reproductive Toxicity:       | This product is not expected to cause reproductive harm in humans.  |
|      | Mutagenicity:                | This product is not expected to cause mutagenic effects in humans.  |
|      | Embryotoxicity:              | This product is not expected to cause embryotoxic effects in humans.  |
|      | Teratogenicity:              | This product is not expected to cause teratogenic effects in humans.  |
|      | Reproductive Toxicity:       | This product is not expected to cause reproductive harm in humans.  |
| 11.6 | Irritancy of Product:        | Not Available   |
| 11.7 | Biological Exposure Indices: | Not Available   |
| 11.8 | Medical Recommendations:     | Treat symptomatically.  |

## 12. ECOLOGICAL INFORMATION

|      |                             |   |
|------|-----------------------------|---|
| 12.1 | Environmental Stability:    | The manufacturer has not reported detailed studies on the environmental fate of the material. However, prudent practice would dictate the material not be allowed to enter the environment. |
| 12.2 | Effect on Plants & Animals: | The manufacturer has not reported any plant and animal effects.   |
| 12.3 | Effect on Aquatic Life:     | The manufacturer has not reported any aquatic life effects.   |



# MATERIAL SAFETY DATA SHEET

Page 4 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 13. DISPOSAL CONSIDERATIONS

|      |                         |  |
|------|-------------------------|--|
| 13.1 | Waste Disposal:         | Dispose of in accordance with regional, federal, state & provincial hazardous waste laws.  |
| 13.2 | Special Considerations: | Refer to manufacturer/supplier for information on recovery/recycling. If the material is unsuitable for recycling or reclamation, enclosed-controlled incineration is recommended unless otherwise prohibited by local ordinance or other statute. |

## 14. TRANSPORTATION INFORMATION

|      |                    |               |  |
|------|--------------------|---------------|--|
| 14.1 | 49 CFR (GND):      | NOT REGULATED |  |
| 14.2 | IATA (AIR):        | NOT REGULATED |  |
| 14.3 | IMDG (OCN):        | NOT REGULATED |  |
| 14.4 | TDGR (Canada GND): | NOT REGULATED |  |
| 14.5 | ADR/RID (EU):      | NOT REGULATED |  |
| 14.6 | MEXICO (SCT):      | NOT REGULATED |  |

## 15. REGULATORY INFORMATION

|      |   |  |  |
|------|---|--|--|
| 15.1 | SARA Reporting Requirements:              | This product does not contain any substances subject to SARA Title III reporting requirements.   |  |
| 15.2 | SARA Threshold Planning Quantity:         | Not applicable   |  |
| 15.3 | TSCA Inventory Status:                    | All components of this product are listed in the TSCA Inventory or are exempt.   |  |
| 15.4 | CERCLA Reportable Quantity (RQ):          | Not Applicable   |  |
| 15.5 | Other Federal Requirements:               | Not Applicable   |  |
| 15.6 | Other Regulations                         | This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List.   |  |
| 15.7 | State Regulatory Information:             | Ingredients in this mixture are not found on any of the following state criteria lists: California OSHA Hazardous Substances List, California Proposition 65, Delaware Air Quality Management List, Florida Toxic Substances List, Massachusetts Hazardous Substances List, Michigan Critical Substances List, Minnesota Hazardous Substances List, New Jersey Right to Know Hazardous Substances List, Pennsylvania Hazardous Substances List, Wisconsin Hazardous Substances List. |  |
| 15.8 | 67/548/EEC (European Union) Requirements: | The primary components of this product are not listed in Annex I of EU Directive 67/548/EEC. Safety Phrases (S): 2-3/9-20/21-45-59 – Keep out of the reach of children. Keep in a cool, well ventilated place. When using, do not eat, drink or smoke. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Refer to manufacturer/supplier for information on recovery/ recycling.  |  |



# MATERIAL SAFETY DATA SHEET



Page 5 of 6  
**303-1002**

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## 16. OTHER INFORMATION

|      |   |  |
|------|---|--|
| 16.1 | Other Information:  | Repels dust, soiling & staining. Protects against UV and ozone deterioration. Use on vinyl & leather interiors, vinyl convertible tops, boats seats, clear vinyl & Lexan windows, spa & pool covers, inflatable boats, canoes, kayaks, car bras, tonneau covers, door and trunk seals, tires, fenders flares, bumpers, trim, lenses, motorcycles, bicycles, ATV's, personal watercraft, snow mobiles, wetsuits, diving equipment, latex rubber, plastic furniture. Not for textiles, unfinished leathers or floors.  |
| 16.2 | Terms & Definitions:  | Please see last page of this Material Safety Data Sheet.   |
| 16.3 | Disclaimer:   | This Material Safety Data Sheet complies with U.S. OSHA's Hazard Communication Standard, 29 CFR §1910.1200 and Health Canada's Workplace Hazardous Materials Information System (WHMIS). To the best of ShipMate's or 303 Products' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product. For additional information regarding use, storage and handling or disposal, contact the manufacturer. |
| 16.4 | Prepared for:<br>303 Products, Inc.<br>10801 Starwood Drive<br>Palo Cedro, CA 96073-0966<br>Phone: +1 (530) 549-5617<br>Web: <a href="http://www.303products.com/">http://www.303products.com/</a>  |    |
| 16.5 | Prepared by:<br>ShipMate, Inc.<br>18436 Hawthorne Blvd, Suite 201<br>Torrance, CA 90504<br>Phone: +1 (310) 370-3600<br>Fax: +1 (310) 370-5700<br>E-mail: <a href="mailto:shipmate@shipmate.com">shipmate@shipmate.com</a><br>Web: <a href="http://www.shipmate.com/">http://www.shipmate.com/</a> |    |



# MATERIAL SAFETY DATA SHEET

Page 6 of 6  
303-1002

Prepared according to the WHMIS, ANSI, NOHSC, ACC, OSHA & 2001/58/EC standards.

Revision 1.1

11/01/2006

## DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

### GENERAL INFORMATION:

|         |                                  |
|---------|----------------------------------|
| CAS No. | Chemical Abstract Service Number |
|---------|----------------------------------|

### EXPOSURE LIMITS IN AIR:

|       |   |
|-------|---|
| ACGIH | American Conference on Governmental Industrial Hygienists |
| TLV   | Threshold Limit Value                                     |
| OSHA  | U.S. Occupational Safety and Health Administration        |
| PEL   | Permissible Exposure Limit                                |
| IDLH  | Immediately Dangerous to Life and Health                  |

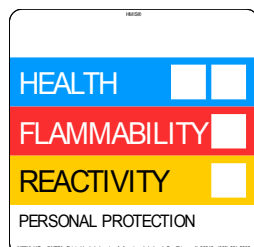
### FIRST AID MEASURES:

|     |  |
|-----|--|
| CPR | Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body. |
|-----|--|

### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

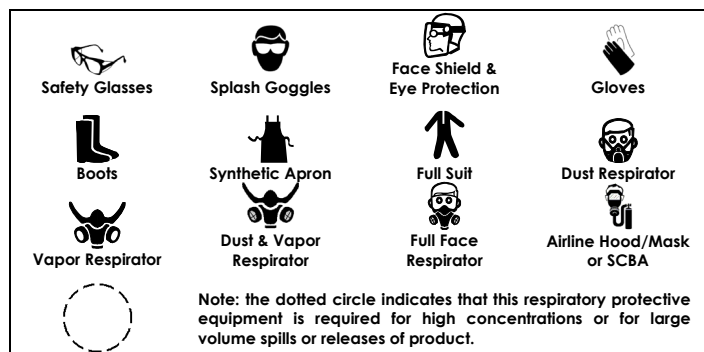
#### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

|   |                 |
|---|-----------------|
| 0 | Minimal Hazard  |
| 1 | Slight Hazard   |
| 2 | Moderate Hazard |
| 3 | Severe Hazard   |
| 4 | Extreme Hazard  |



#### PERSONAL PROTECTION RATINGS:

|   |  |   |  |
|---|--|---|--|
| A |  | G |  |
| B |  | H |  |
| C |  | I |  |
| D |  | J |  |
| E |  | K |  |
| F |  | X | Consult your supervisor or S.O.P. for special handling directions. |



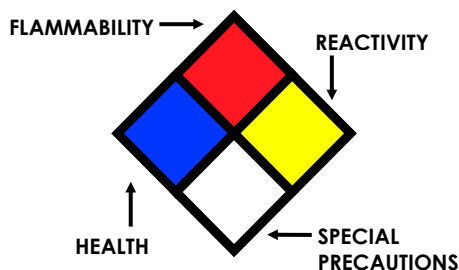
#### OTHER STANDARD ABBREVIATIONS:

|      |                                    |
|------|------------------------------------|
| NA   | Not Available                      |
| NR   | No Results                         |
| NE   | Not Established                    |
| ND   | Not Determined                     |
| ML   | Maximum Limit                      |
| SCBA | Self-Contained Breathing Apparatus |

### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

#### FLAMMABILITY LIMITS IN AIR:

|                          |   |
|--------------------------|---|
| Autoignition Temperature | Minimum temperature required to initiate combustion in air with no other source of ignition   |
| LEL                      | Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source  |
| UEL                      | Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source |



#### HAZARD RATINGS:

|   |                 |
|---|-----------------|
| 0 | Minimal Hazard  |
| 1 | Slight Hazard   |
| 2 | Moderate Hazard |
| 3 | Severe Hazard   |
| 4 | Extreme Hazard  |

|     |              |
|-----|--------------|
| ACD | Acidic       |
| ALK | Alkaline     |
| COR | Corrosive    |
| -W  | Use No Water |
| OX  | Oxidizer     |

#### TOXICOLOGICAL INFORMATION:

|   |   |
|---|---|
| LD <sub>50</sub>  | Lethal Dose (solids & liquids) which kills 50% of the exposed animals |
| LC <sub>50</sub>  | Lethal concentration (gases) which kills 50% of the exposed animal    |
| ppm   | Concentration expressed in parts of material per million parts        |
| TD <sub>10</sub>  | Lowest dose to cause a symptom  |
| TCLo  | Lowest concentration to cause a symptom                               |
| TD <sub>10</sub> , LD <sub>10</sub> , & LD <sub>0</sub> or TC, TC <sub>0</sub> , LC <sub>10</sub> , & LC <sub>0</sub> | Lowest dose (or concentration) to cause lethal or toxic effects       |
| IARC  | International Agency for Research on Cancer                           |
| NTP   | National Toxicology Program   |
| RTECS   | Registry of Toxic Effects of Chemical Substances                      |
| BCF   | Bioconcentration Factor   |
| TL <sub>m</sub>   | Median threshold limit  |
| log K <sub>ow</sub> or log K <sub>oc</sub>  | Coefficient of Oil/Water Distribution                                 |

#### REGULATORY INFORMATION:

|       |  |
|-------|--|
| WHMIS | Canadian Workplace Hazardous Material Information System |
| DOT   | U.S. Department of Transportation                        |
| TC    | Transport Canada   |
| EPA   | U.S. Environmental Protection Agency                     |
| DSL   | Canadian Domestic Substance List                         |
| NDSL  | Canadian Non-Domestic Substance List                     |
| TSCA  | U.S. Toxic Substance Control Act                         |



## Material Safety Data Sheet

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**PRODUCT NAME:** 3M™ Bondo Lightweight Body Filler 261, 261C, 262, 262C, 262ES, 262T, 262W, 265, 265C, 265ES, 265L, 265W, 267, 267C

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)**

**Issue Date:** 09/22/09

**Supersedes Date:** 05/14/09

**Document Group:** 24-2445-5

### ID Number(s):

60-4550-4828-4, 60-4550-4829-2, 70-0080-0006-2, 70-0080-0007-0, 70-0080-0008-8, 70-0080-0044-3, 70-0080-0045-0, 70-0080-0047-6, 70-0080-0048-4, 70-0080-0052-6, 70-0080-0056-7, 70-0080-0058-3, 70-0080-0059-1

**This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:**

24-2444-8, 24-2136-0

### Revision Changes:

Kit: Component document group number(s) was modified.

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Bondo(r) Lightweight Body Filler 260, 261, 261C, 261E, 262, 262C, 262ES, 262L, 262T, 262W, 263, 264, 264S, 265, 265C, 265ES, 265T, 265W, 267, 267C

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 02/08/11

**Supersedes Date:** 01/14/11

**Document Group:** 24-2444-8

**Product Use:**

Intended Use: Automotive

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>   | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|---|-------------------|----------------|
| 1,3-ISOBENZOFURANDIONE, POLYMER WITH 2,5-FURANDIONE AND 2,2'-OXYBIS[ETHANOL]                      | 26123-45-5        | 15 - 40        |
| TALC  | 14807-96-6        | 10 - 30        |
| STYRENE MONOMER   | 100-42-5          | 10 - 30        |
| MAGNESIUM CARBONATE   | 546-93-0          | 7 - 15         |
| SODIUM SILICATE   | 1344-09-8         | 3 - 7          |
| LIMESTONE   | 1317-65-3         | 1 - 5          |
| QUATERNARY AMMONIUM COMPOUNDS, BIS(HYDROGENATED TALLOW ALKYL)DIMETHYL, SALTS WITH MONTMORILLONITE | 68911-87-5        | 1 - 5          |
| CHLORITE (MINERAL)  | 1318-59-8         | 0.1 - 2.0      |
| TITANIUM DIOXIDE  | 13463-67-7        | 0.1 - 1.0      |
| QUARTZ SILICA   | 14808-60-7        | 0.1 - 1.0      |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Paste

**Odor, Color, Grade:** Thick fibrous paste, styrene odor

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause severe eye irritation. May cause severe skin irritation. May cause target organ effects. Contains a chemical or chemicals which can cause cancer.

### 3.2 POTENTIAL HEALTH EFFECTS

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Skin Contact:**

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

**Inhalation:**

Intentional concentration and inhalation may be harmful or fatal.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

May be absorbed following inhalation and cause target organ effects.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Prolonged or repeated exposure may cause:

Immunological Effects: Signs/symptoms may include alterations in the number of circulating immune cells, allergic skin and/or respiratory reaction, and changes in immune function.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

#### Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Class Description</u>       | <u>Regulation</u>                           |
|-------------------|-------------------|--------------------------------|---|
| QUARTZ SILICA     | 14808-60-7        | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| STYRENE MONOMER   | 100-42-5          | Grp. 2B: Possible human carc.  | International Agency for Research on Cancer |

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

|                                 |   |
|---------------------------------|---|
| <b>Autoignition temperature</b> | <i>No Data Available</i>                          |
| <b>Flash Point</b>              | 80 °F - 82 °F [ <i>Test Method:</i> Closed Cup]   |
| <b>Flash Point</b>              | 26.67 - 27.78 °C [ <i>Test Method:</i> SETAFLASH] |
| <b>Flammable Limits(LEL)</b>    | 0.9 %   |
| <b>Flammable Limits(UEL)</b>    | 6.8 %   |

**OSHA Flammability Classification:**

Class IC Flammable Liquid

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

### 6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Avoid breathing of vapors, mists or spray. Avoid static discharge. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Do not breathe dust. Avoid contact with oxidizing agents.

## 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Use in an enclosed process area is recommended. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact. Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

.

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA)

Polymer laminate

.

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Do not breathe dust.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters

. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

### 8.3 EXPOSURE GUIDELINES

| <u><b>Ingredient</b></u> | <u><b>Authority</b></u> | <u><b>Type</b></u>               | <u><b>Limit</b></u> | <u><b>Additional Information</b></u> |
|--------------------------|-------------------------|----------------------------------|---------------------|--------------------------------------|
| LIMESTONE                | OSHA                    | TWA, respirable fraction         | 5 mg/m3             |                                      |
| LIMESTONE                | OSHA                    | TWA, as total dust               | 15 mg/m3            |                                      |
| MAGNESIUM CARBONATE      | OSHA                    | TWA, respirable fraction         | 5 mg/m3             |                                      |
| MAGNESIUM CARBONATE      | OSHA                    | TWA, as total dust               | 15 mg/m3            |                                      |
| QUARTZ SILICA            | ACGIH                   | TWA, respirable fraction         | 0.025 mg/m3         |                                      |
| QUARTZ SILICA            | OSHA                    | TWA concentration, respirable    | 0.1 mg/m3           |                                      |
| QUARTZ SILICA            | OSHA                    | TWA concentration, as total dust | 0.3 mg/m3           |                                      |
| SILICA, AMORPHOUS        | OSHA                    | TWA concentration                | 0.8 mg/m3           |                                      |

|                   |       |      |                                  |
|-------------------|-------|------|----------------------------------|
| SILICA, AMORPHOUS | OSHA  | TWA  | 20 millions of particles/cu. ft. |
| STYRENE MONOMER   | ACGIH | TWA  | 20 ppm                           |
| STYRENE MONOMER   | ACGIH | STEL | 40 ppm                           |
| STYRENE MONOMER   | OSHA  | TWA  | 100 ppm                          |
| STYRENE MONOMER   | OSHA  | CEIL | 200 ppm                          |

**SOURCE OF EXPOSURE LIMIT DATA:**

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Specific Physical Form:</b>            | Paste  |
| <b>Odor, Color, Grade:</b>                | Thick fibrous paste, styrene odor                                |
| <b>General Physical Form:</b>             | Liquid   |
| <b>Autoignition temperature</b>           | <i>No Data Available</i>   |
| <b>Flash Point</b>                        | 80 °F - 82 °F [ <i>Test Method:</i> Closed Cup]                  |
| <b>Flash Point</b>                        | 26.67 - 27.78 °C [ <i>Test Method:</i> SETAFLASH]                |
| <b>Flammable Limits(LEL)</b>              | 0.9 %  |
| <b>Flammable Limits(UEL)</b>              | 6.8 %  |
| <b>Boiling Point</b>                      | 293.00 °F [ <i>Details:</i> CONDITIONS: (Styrene)]               |
| <b>Density</b>                            | 9.5126 lb/gal  |
| <b>Density</b>                            | 1.14 g/ml  |
| <b>Vapor Density</b>                      | <i>No Data Available</i>   |
| <b>Vapor Pressure</b>                     | 5.2 mmHg [ <i>Details:</i> CONDITIONS: at 20 C]                  |
| <b>Specific Gravity</b>                   | 1.14 [ <i>Ref Std:</i> WATER=1]                                  |
| <b>pH</b>                                 | <i>No Data Available</i>   |
| <b>Melting point</b>                      | <i>No Data Available</i>   |
| <b>Solubility in Water</b>                | Nil  |
| <b>Evaporation rate</b>                   | <i>No Data Available</i>   |
| <b>Hazardous Air Pollutants</b>           | 17.8 % weight [ <i>Test Method:</i> Calculated]                  |
| <b>Volatile Organic Compounds</b>         | 203 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]      |
| <b>Volatile Organic Compounds</b>         | 17.8 % weight [ <i>Test Method:</i> calculated per CARB title 2] |
| <b>Kow - Oct/Water partition coef</b>     | <i>No Data Available</i>   |
| <b>Percent volatile</b>                   | 21.03 %  |
| <b>VOC Less H2O &amp; Exempt Solvents</b> | 204 g/l [ <i>Test Method:</i> calculated SCAQMD rule 443.1]      |
| <b>VOC Less H2O &amp; Exempt Solvents</b> | 1.71 lb/gal [ <i>Test Method:</i> calculated SCAQMD rule 443.1]  |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:**

**10.1 Conditions to avoid**

None known

#### 10.2 Materials to avoid

Strong acids  
Strong bases  
Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

#### Hazardous Decomposition or By-Products

| <u>Substance</u>              | <u>Condition</u>  |
|-------------------------------|-------------------|
| Hydrocarbons                  | Not Specified     |
| Carbon monoxide               | During Combustion |
| Carbon dioxide                | During Combustion |
| Styrene Oxide                 | Not Specified     |
| Toxic Vapor, Gas, Particulate | Not Specified     |

### SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

### SECTION 12: ECOLOGICAL INFORMATION

#### ECOTOXICOLOGICAL INFORMATION

Not determined.

#### CHEMICAL FATE INFORMATION

Not determined.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

Since regulations vary, consult applicable regulations or authorities before disposal.

### SECTION 14: TRANSPORT INFORMATION

**ID Number(s):**

41-0003-6562-1, 41-3701-1570-5

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

**Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):**

| <u><b>Ingredient</b></u> | <u><b>C.A.S. No</b></u> | <u><b>% by Wt</b></u> |
|--------------------------|-------------------------|-----------------------|
| STYRENE MONOMER          | 100-42-5                | 10 - 30               |

### STATE REGULATIONS

Contact 3M for more information.

### CALIFORNIA PROPOSITION 65

| <u><b>Ingredient</b></u>                                    | <u><b>C.A.S. No.</b></u> | <u><b>Classification</b></u> |
|---|--------------------------|------------------------------|
| SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE) | SEQ677                   | **Carcinogen                 |

\*\* WARNING: contains a chemical which can cause cancer.

### CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Reason for Reissue:** The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

#### Revision Changes:

Section 8: Skin protection - recommended gloves information was modified.

Section 2: Ingredient table was modified.

**DISCLAIMER:** The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M™ Bondo Red Cream Hardener 307, 913, 913M, 913C, 913ES, 928, 928C, 9307, 7653079, 810505D, 510506D, 810507D

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center, St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 04/13/11

**Supersedes Date:** 04/11/11

**Document Group:** 24-2136-0

#### Product Use:

Intended Use: Automotive

Specific Use: Catalyst for Automotive Body Fillers

### SECTION 2: INGREDIENTS

| <u>Ingredient</u>                                    | <u>C.A.S. No.</u> | <u>% by Wt</u> |
|--|-------------------|----------------|
| BENZOYL PEROXIDE                                     | 94-36-0           | 30 - 60        |
| WATER  | 7732-18-5         | 10 - 30        |
| BENZOIC ACID, C9-11-BRANCHED ALKYL ESTERS            | 131298-44-7       | 10 - 20        |
| ZINC STEARATE  | 557-05-1          | 3 - 7          |
| OXIRANE, POLYMER WITH METHYLOXIRANE, MONOBUTYL ETHER | 9038-95-3         | 1 - 5          |
| CALCIUM SULFATE                                      | 7778-18-9         | 1 - 5          |
| IRON OXIDE (FE2O3)                                   | 1309-37-1         | 1 - 5          |

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Viscous

**Odor, Color, Grade:** Red paste with slight ester odor

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** Closed containers exposed to heat from fire may build pressure and explode. Dust clouds of this material in combination with an ignition source may be explosive. May cause severe eye irritation. May cause allergic skin reaction.

### **3.2 POTENTIAL HEALTH EFFECTS**

**Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

**Skin Contact:**

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, and itching.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

**Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

**Target Organ Effects:**

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

## **SECTION 4: FIRST AID MEASURES**

### **4.1 FIRST AID PROCEDURES**

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**If Swallowed:** Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

### **5.1 FLAMMABLE PROPERTIES**

Autoignition temperature  
Flash Point  
Flammable Limits(LEL)  
Flammable Limits(UEL)

No Data Available  
111 °C [Test Method: Estimated]  
Not Applicable  
Not Applicable

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

Water from a safe distance - preferably with a fog nozzle. In case of small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective.

## 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Closed containers exposed to heat from fire may build pressure and explode. Dust clouds of this material in combination with an ignition source may be explosive. Fire hazard increases when material becomes dry. Part of the oxygen for combustion is supplied by the peroxide itself.

**Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.**

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

### 6.2. Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

### Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

**In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.**

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid eye contact with dust or airborne particles.

### 7.2 STORAGE

Store away from heat. Store out of direct sunlight. Keep container tightly closed. Do not heat under confinement to avoid risk of

explosion. Storage at elevated temperatures will shorten shelf life.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields

Indirect Vented Goggles

#### 8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polymer laminate

Use an additional glove (e.g. supported PVC or Nitrile) over the PE/EVAL glove, and change the over-glove frequently.

#### 8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

#### 8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

### 8.3 EXPOSURE GUIDELINES

| <u><b>Ingredient</b></u> | <u><b>Authority</b></u> | <u><b>Type</b></u>       | <u><b>Limit</b></u> | <u><b>Additional Information</b></u> |
|--------------------------|-------------------------|--------------------------|---------------------|--------------------------------------|
| ZINC STEARATE            | OSHA                    | TWA, respirable fraction | 5 mg/m3             |                                      |
| ZINC STEARATE            | OSHA                    | TWA, as total dust       | 15 mg/m3            |                                      |
| BENZOYL PEROXIDE         | ACGIH                   | TWA                      | 5 mg/m3             |                                      |
| BENZOYL PEROXIDE         | OSHA                    | TWA                      | 5 mg/m3             |                                      |
| CALCIUM SULFATE          | ACGIH                   | TWA, inhalable fraction  | 10 mg/m3            |                                      |
| CALCIUM SULFATE          | OSHA                    | TWA, respirable fraction | 5 mg/m3             |                                      |
| CALCIUM SULFATE          | OSHA                    | TWA, as total dust       | 15 mg/m3            |                                      |
| IRON OXIDE (FE2O3)       | ACGIH                   | TWA, respirable fraction | 5 mg/m3             |                                      |
| IRON OXIDE (FE2O3)       | OSHA                    | TWA, as fume             | 10 mg/m3            |                                      |

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists  
CMRG: Chemical Manufacturer Recommended Guideline  
OSHA: Occupational Safety and Health Administration  
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|   |   |
|---|---|
| Specific Physical Form:                     | Viscous   |
| Odor, Color, Grade:                         | Red paste with slight ester odor                      |
| General Physical Form:                      | Solid   |
| Autoignition temperature                    | No Data Available                                     |
| Flash Point                                 | 111 °C [Test Method: Estimated]                       |
| Flammable Limits(LEL)                       | Not Applicable  |
| Flammable Limits(UEL)                       | Not Applicable  |
| Boiling Point                               | No Data Available                                     |
| Density                                     | 1.2 g/cm <sup>3</sup>                                 |
| Vapor Density                               | Not Applicable  |
| Vapor Pressure                              | Not Applicable  |
| Specific Gravity                            | 1.2 [@ 25 °C] [Ref Std: WATER=1]                      |
| pH  | No Data Available                                     |
| Melting point                               | No Data Available                                     |
| Solubility in Water                         | Negligible  |
| Evaporation rate                            | No Data Available                                     |
| Hazardous Air Pollutants                    | 0 % weight [Test Method: Calculated]                  |
| Volatile Organic Compounds                  | 0 lb/gal [Test Method: calculated SCAQMD rule 443.1]  |
| Volatile Organic Compounds                  | 0 g/l [Test Method: calculated SCAQMD rule 443.1]     |
| Volatile Organic Compounds                  | 0 % weight [Test Method: calculated per CARB title 2] |
| Kow - Oct/Water partition coef              | No Data Available                                     |
| Percent volatile                            | 20 % [Details: Water is the volatile component]       |
| VOC Less H <sub>2</sub> O & Exempt Solvents | 0 g/l [Test Method: calculated SCAQMD rule 443.1]     |
| Viscosity                                   | No Data Available                                     |

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable. Stable unless exposed to heat, flames and drying conditions.

### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Heat

#### 10.2 Materials to avoid

Accelerators

Additional Information: Storage at elevated temperatures will shorten shelf life.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

**Substance**

Carbon monoxide  
Carbon dioxide  
Toxic Vapor, Gas, Particulate

**Condition**

Not Specified  
Not Specified  
Not Specified

**SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICOLOGICAL INFORMATION**

Not determined.

**CHEMICAL FATE INFORMATION**

Not determined.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

**EPA Hazardous Waste Number (RCRA):** Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

**SECTION 14: TRANSPORT INFORMATION**

**ID Number(s):**

LB-K100-0415-4, LB-K100-0415-5, LB-K100-0415-6, LB-K100-0415-7, LB-K100-0540-4, 41-0003-6615-7, 60-4550-4812-8, 60-4550-4999-3, 60-4550-5166-8, 60-4550-5582-6, 60-4550-5584-2, 70-0080-0037-7, 70-0080-0039-3, 70-0080-0147-4, 70-0080-0164-9, 70-0080-0172-2, 70-0080-0173-0, 70-0080-0174-8, 70-0080-0704-2, 70-0080-0705-9, 70-0080-0706-7

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: REGULATORY INFORMATION**

**US FEDERAL REGULATIONS**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - Yes Immediate Hazard - Yes Delayed Hazard - Yes

**Section 313 Toxic Chemicals** subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

| <u>Ingredient</u>              | <u>C.A.S. No</u> | <u>% by Wt</u> |
|--------------------------------|------------------|----------------|
| ZINC STEARATE (ZINC COMPOUNDS) | 557-05-1         | 3 - 7          |
| BENZOYL PEROXIDE               | 94-36-0          | 30 - 60        |

## STATE REGULATIONS

Contact 3M for more information.

## CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

**WHMIS:** Hazardous

|  |
|--|
| This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
|--|

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

**Health:** 2 **Flammability:** 1 **Reactivity:** 1 **Special Hazards:** Oxidizer

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health:** 2 **Flammability:** 1 **Reactivity:** 1 **Protection:** X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

### Revision Changes:

Section 4: First aid for eye contact - decontamination - was modified.

Section 4: First aid for eye contact - medical assistance - was modified.

Section 3: Potential effects from eye contact was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Immediate eye hazard(s) was added.

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# SAFETY DATA SHEET



Molub-Alloy 777-1 ES

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier** Molub-Alloy 777-1 ES  
**SDS #** 464073  
**Historic SDS #:** 73361  
**Code** 464073-US17

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** Grease for industrial applications  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Manufacturer** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL  
Product Information: +1-877-641-1600

**Supplier** PAN AMERICAN ENERGY LLC, SUCURSAL  
ARGENTINA AV. LEANDRO N. ALEM 1180  
PISO 11 – C1001AAT  
CIUDAD AUTÓNOMA DE BUENOS AIRES.

**EMERGENCY HEALTH INFORMATION:** Consultas Técnicas 0800-888-8088  
TELÉFONO PARA EMERGENCIAS (24 HORAS) CIQUIME: 0800-222-2933  
+1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

**EMERGENCY TELEPHONE NUMBER**

## SECTION 2: Hazards identification

**Classification of the substance or mixture** SKIN SENSITIZATION - Category 1

### GHS label elements

#### **Hazard pictograms**



**Signal word** Warning  
**Hazard statements** H317 - May cause an allergic skin reaction.

### Precautionary statements

**Prevention** P280 - Wear protective gloves.  
P261 - Avoid breathing vapor.  
P272 - Contaminated work clothing should not be allowed out of the workplace.  
**Response** P302 + P352 + P362 + P364 - IF ON SKIN: Wash with plenty of soap and water.  
Take off contaminated clothing and wash it before reuse.  
P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
**Storage** Not applicable.

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 1/10

**Date of issue** 11/14/2019.

**Format** Argentina

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**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 2: Hazards identification

### Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Other hazards which do not result in classification

Defatting to the skin.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

## SECTION 3: Composition/information on ingredients

### Substance/mixture

Mixture

Highly refined mineral oil and additives. Thickening agent.

### Other means of identification

Not available.

| Ingredient name                              | CAS number                        | %         |
|--|-----------------------------------|-----------|
| Base oil - highly refined                    | Varies - See Key to abbreviations | ≥75 - ≤90 |
| 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione | 72676-55-2                        | <2.5      |
| Molybdenum disulfide                         | 1317-33-5                         | ≤3        |
| (Z)-N-9-octadecenylpropane-1,3-diamine       | 7173-62-8                         | <0.1      |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### Description of necessary first aid measures

#### Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

#### Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Clean shoes thoroughly before reuse. In the event of any complaints or symptoms, avoid further exposure. Get medical attention.

#### Inhalation

If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

#### Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse health effects persist or are severe.

#### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### Indication of immediate medical attention and special treatment needed, if necessary

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 2/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 4: First aid measures

### Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

### Specific treatments

No specific treatment.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

#### Unsuitable extinguishing media

Do not use water jet.

### Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

#### Hazardous thermal decomposition products

Combustion products may include the following:

metal oxide/oxides

carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)

sulfur oxides (SO, SO<sub>2</sub> etc.)

nitrogen oxides (NO, NO<sub>2</sub> etc.)

### Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

### Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

### Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 3/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 6: Accidental release measures

### Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

## SECTION 7: Handling and storage

### Precautions for safe handling

## Protective measures

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## SECTION 8: Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name           | Exposure limits  |
|---------------------------|--|
| Base oil - highly refined | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Issued/Revised: 11/2003 Form: mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Issued/Revised: 11/2003 Form: mist |
| Molybdenum disulfide      | <b>Ministry of Labor, Employment and Social Security. Argentina (Resolution 295,11/2003) (Argentina).</b><br>TWA: 3 mg/m <sup>3</sup> , (as Mo) 8 hours. Issued/Revised: 2/2001 Form: respirable fraction  |

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

## SECTION 8: Exposure controls/personal protection

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety glasses with side shields.

#### Skin protection

##### Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

##### Body protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

##### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m<sup>3</sup>), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m<sup>3</sup>).

Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being

## SECTION 8: Exposure controls/personal protection

handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## SECTION 9: Physical and chemical properties

### Appearance

|  |   |
|--|---|
| Physical state                               | Grease  |
| Color  | Gray. [Dark]  |
| Odor   | Mild.   |
| Odor threshold                               | Not available.  |
| pH   | Not available.  |
| Melting point                                | Not available.  |
| Boiling point                                | Not available.  |
| Flash point                                  | Open cup: 260°C (500°F) [Cleveland.]                    |
| Evaporation rate                             | Not available.  |
| Flammability (solid, gas)                    | Not applicable. Based on - Physical state               |
| Lower and upper explosive (flammable) limits | Not available.  |
| Vapor pressure                               | Not available.  |
| Vapor density                                | Not available.  |
| Density                                      | <1000 kg/m <sup>3</sup> (<1 g/cm <sup>3</sup> ) at 25°C |
| Solubility                                   | insoluble in water.                                     |
| Partition coefficient: n-octanol/water       | Not available.  |
| Auto-ignition temperature                    | Not available.  |
| Decomposition temperature                    | Not available.  |
| Viscosity                                    | Not available.  |

## SECTION 10: Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.                                   |
| Chemical stability                 | The product is stable.  |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous polymerization will not occur. |
| Conditions to avoid                | No specific data.   |
| Incompatible materials             | Reactive or incompatible with the following materials: oxidizing materials.   |
| Hazardous decomposition products   | Under normal conditions of storage and use, hazardous decomposition products should not be produced.  |

## SECTION 11: Toxicological information

### Information on toxicological effects

#### Specific target organ toxicity (repeated exposure)

| Name                                   | Category   | Route of exposure | Target organs  |
|--|------------|-------------------|----------------|
| (Z)-N-9-octadecenylpropane-1,3-diamine | Category 1 | Not determined    | Not determined |

### Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

No known significant effects or critical hazards.

#### Skin contact

Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

#### Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

#### Ingestion

No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

#### Eye contact

No specific data.

#### Skin contact

Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking

#### Inhalation

No specific data.

#### Ingestion

No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

#### Long term exposure

##### Potential immediate effects

Not available.

##### Potential delayed effects

Not available.

### Potential chronic health effects

#### General

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

#### Teratogenicity

No known significant effects or critical hazards.

#### Developmental effects

No known significant effects or critical hazards.

#### Fertility effects

No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route          |
|----------------|
| Not available. |

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 7/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 11: Toxicological information

## SECTION 12: Ecological information

### Toxicity

**Environmental effects** No known significant effects or critical hazards.

### Persistence and degradability

Expected to be biodegradable.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient ( $K_{oc}$ )** Not available.

**Mobility** Non-volatile. Grease. insoluble in water.

**Other adverse effects** No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|                                   | ADR/RID        | ADN            | IMDG           | IATA/ICAO      |
|-----------------------------------|----------------|----------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -              | -              | -              | -              |
| <b>Transport hazard class(es)</b> | -              | -              | -              | -              |
| <b>Packing group</b>              | -              | -              | -              | -              |
| <b>Environmental hazards</b>      | No.            | No.            | No.            | No.            |
| <b>Additional information</b>     | -              | -              | -              | -              |

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 8/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

(AR)

(ENGLISH)

## SECTION 14: Transport information

**Special precautions for user** Not available.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** Not available.

## SECTION 15: Regulatory information

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Other regulations

**Australia inventory (AICS)** All components are listed or exempted.

**Canada inventory** All components are listed or exempted.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (ENCS)** All components are listed or exempted.

**Korea inventory (KECI)** All components are listed or exempted.

**Philippines inventory (PICCS)** All components are listed or exempted.

**Taiwan Chemical Substances Inventory (TCSI)** All components are listed or exempted.

**United States inventory (TSCA 8b)** All components are active or exempted.

**REACH Status** The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

## SECTION 16: Other information

### History

**Date of issue/Date of revision** 11/14/2019.

**Date of previous issue** 08/28/2019.

**Prepared by** Product Stewardship

**Key to abbreviations**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway  
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container

**Product name** Molub-Alloy 777-1 ES

**Product code** 464073-US17

**Page:** 9/10

**Date of issue** 11/14/2019.

**Format** Argentina

**Language** ENGLISH

**Version** 2.01

**(AR)**

**(ENGLISH)**

## SECTION 16: Other information

IMDG = International Maritime Dangerous Goods

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

VOC = Volatile Organic Compound

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1, 74869-22-0, 90669-74-2

Indicates information that has changed from previously issued version.

### Notice to reader

*All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.*

*The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.*

*It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.*

**Section 1. Identification**

**Product name** Tribol GR 4020/220-2 PD  
**SDS #** 468726  
**Code** 468726-US26

**Relevant identified uses of the substance or mixture and uses advised against**

**Product use** Grease for industrial applications.  
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Supplier** BP Lubricants USA Inc.  
1500 Valley Road  
Wayne, NJ 07470  
Telephone: +1-888-CASTROL

**EMERGENCY HEALTH INFORMATION:** +1-800-447-8735

**EMERGENCY SPILL INFORMATION:** +1-800-424-9300 (CHEMTREC USA)  
+1-703-527-3887 (CHEMTREC outside the US)

**Section 2. Hazards identification**

**OSHA/HCS status** This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** Not classified.

**GHS label elements**

**Signal word** No signal word.

**Hazard statements** No known significant effects or critical hazards.

**Precautionary statements**

**Prevention** Not applicable.

**Response** Not applicable.

**Storage** Not applicable.

**Disposal** Not applicable.

**Hazards not otherwise classified** None known.

**Section 3. Composition/information on ingredients**

**Substance/mixture** Mixture  
Highly refined mineral oil and additives. Thickening agent.

| Ingredient name  | CAS number | %         |
|--|------------|-----------|
| Distillates (petroleum), hydrotreated heavy naphthenic               | 64742-52-5 | ≥25 - ≤50 |
| Residual oils (petroleum), solvent refined                           | 64742-01-4 | ≥25 - ≤50 |
| Distillates (petroleum), solvent-refined heavy paraffinic            | 64741-88-4 | ≤10       |
| Molybdenum, bis(dibutylcarbamodithioato)di-μ-oxodioxodi-, sulfurized | 68412-26-0 | ≤3        |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

|                                   |   |
|-----------------------------------|---|
| <b>Eye contact</b>                | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.             |
| <b>Skin contact</b>               | Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.                   |
| <b>Inhalation</b>                 | If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur. |
| <b>Ingestion</b>                  | Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.  |
| <b>Protection of first-aiders</b> | No action shall be taken involving any personal risk or without suitable training.  |

### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### Indication of immediate medical attention and special treatment needed, if necessary

|                            |   |
|----------------------------|---|
| <b>Notes to physician</b>  | Treatment should in general be symptomatic and directed to relieving any effects. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.<br><br>Note: High Pressure Applications<br>Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes. |
| <b>Specific treatments</b> | No specific treatment.  |

## Section 5. Fire-fighting measures

### Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet.   |

### Specific hazards arising from the chemical

No specific fire or explosion hazard.

### Hazardous combustion products

Combustion products may include the following:  
metal oxide/oxides  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)  
sulfur oxides (SO, SO<sub>2</sub> etc.)  
nitrogen oxides (NO, NO<sub>2</sub> etc.)

### Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

## Section 5. Fire-fighting measures

### Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

#### For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

#### Small spill

Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

#### Large spill

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8).

#### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Distillates (petroleum), hydrotreated heavy naphthenic

#### ACGIH TLV (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

#### OSHA PEL (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 6/1993

Residual oils (petroleum), solvent refined

#### ACGIH TLV (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised: 11/2009 Form: Inhalable fraction

#### OSHA PEL (United States).

## Section 8. Exposure controls/personal protection

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
6/1993

Distillates (petroleum), solvent-refined heavy paraffinic

### ACGIH TLV (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
11/2009 Form: Inhalable fraction

### OSHA PEL (United States).

TWA: 5 mg/m<sup>3</sup> 8 hours. Issued/Revised:  
6/1993

Molybdenum, bis(dibutylcarbamodithioato)di-μ-oxodioxodi-, sulfurized

### ACGIH TLV (United States).

TWA: 10 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 2/2001 Form: Inhalable fraction

TWA: 3 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 2/2001 Form: Respirable fraction

### OSHA PEL (United States).

TWA: 15 mg/m<sup>3</sup>, (as Mo) 8 hours. Issued/  
Revised: 6/1993 Form: Total dust

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety glasses with side shields.

#### Skin protection

#### Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

#### Body protection

Use of protective clothing is good industrial practice.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

## Section 8. Exposure controls/personal protection

### Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.  
For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, half-mask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m<sup>3</sup>), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m<sup>3</sup>).  
Where organic vapours are a potential hazard during metalworking operations, a combination particulate and organic vapour filter may be necessary.  
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

|   |  |
|---|--|
| Physical state  | Grease   |
| Color   | Amber. [Light]   |
| Odor  | Not available.   |
| Odor threshold  | Not available.   |
| pH  | Not applicable.  |
| Melting point/freezing point                            | Not available.   |
| Boiling point, initial boiling point, and boiling range | Not available.   |
| Flash point   | Open cup: 225°C (437°F) [Cleveland Estimated. Based on Lubricants - Base Oils] |
| Evaporation rate  | Not available.   |
| Flammability  | Not applicable. Based on - Physical state                                      |
| Lower and upper explosion limit/flammability limit      | Not applicable.  |
| Vapor pressure  | Not available.   |
| Relative vapor density                                  | Not applicable.  |
| Density   | <1000 kg/m <sup>3</sup> (<1 g/cm <sup>3</sup> ) at 25°C                        |
| Solubility  | insoluble in water.  |
| Partition coefficient: n-octanol/water                  | Not applicable.  |
| Auto-ignition temperature                               | Not applicable.  |
| Decomposition temperature                               | Not available.   |
| Viscosity   | Kinematic: 220 mm <sup>2</sup> /s (220 cSt) at 40°C                            |
| Particle characteristics                                |  |
| Median particle size                                    | Not available.   |

## Section 10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.                                   |
| Chemical stability                 | The product is stable.  |
| Possibility of hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur.<br>Under normal conditions of storage and use, hazardous polymerization will not occur. |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Conditions to avoid</b>              | Avoid all possible sources of ignition (spark or flame).   |
| <b>Incompatible materials</b>           | Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.       |
| <b>Hazardous decomposition products</b> | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

|   |  |
|---|--|
| <b>Information on the likely routes of exposure</b> | Routes of entry anticipated: Dermal, Inhalation.   |
| <b><u>Potential acute health effects</u></b>        |  |
| <b>Eye contact</b>                                  | No known significant effects or critical hazards.  |
| <b>Skin contact</b>                                 | No known significant effects or critical hazards.  |
| <b>Inhalation</b>                                   | Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| <b>Ingestion</b>                                    | No known significant effects or critical hazards.  |

### Symptoms related to the physical, chemical and toxicological characteristics

|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | No specific data.  |
| <b>Skin contact</b> | Adverse symptoms may include the following:<br>irritation<br>dryness<br>cracking |
| <b>Inhalation</b>   | No specific data.  |
| <b>Ingestion</b>    | No specific data.  |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                                    |                |
|------------------------------------|----------------|
| <b>Potential immediate effects</b> | Not available. |
| <b>Potential delayed effects</b>   | Not available. |

#### Long term exposure

|                                    |                |
|------------------------------------|----------------|
| <b>Potential immediate effects</b> | Not available. |
| <b>Potential delayed effects</b>   | Not available. |

#### Potential chronic health effects

|                              |   |
|------------------------------|---|
| <b>General</b>               | No known significant effects or critical hazards. |
| <b>Carcinogenicity</b>       | No known significant effects or critical hazards. |
| <b>Mutagenicity</b>          | No known significant effects or critical hazards. |
| <b>Teratogenicity</b>        | No known significant effects or critical hazards. |
| <b>Developmental effects</b> | No known significant effects or critical hazards. |
| <b>Fertility effects</b>     | No known significant effects or critical hazards. |

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

No testing has been performed by the manufacturer.

### Persistence and degradability

Not expected to be rapidly degradable.

### Bioaccumulative potential

Not available.

### Mobility in soil

#### Soil/water partition coefficient (K<sub>oc</sub>)

Not available.

#### Mobility

Non-volatile. Grease. insoluble in water.

### Other adverse effects

No known significant effects or critical hazards.

## Section 13. Disposal considerations

### Disposal methods

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>DOT Classification</b> | <b>TDG Classification</b> | <b>IMDG</b>    | <b>IATA</b>    |
|-----------------------------------|---------------------------|---------------------------|----------------|----------------|
| <b>UN number</b>                  | Not regulated.            | Not regulated.            | Not regulated. | Not regulated. |
| <b>UN proper shipping name</b>    | -                         | -                         | -              | -              |
| <b>Transport hazard class(es)</b> | -                         | -                         | -              | -              |
| <b>Packing group</b>              | -                         | -                         | -              | -              |
| <b>Environmental hazards</b>      | No.                       | No.                       | No.            | No.            |
| <b>Additional information</b>     | -                         | -                         | -              | -              |

### Special precautions for user

Not available.

### Transport in bulk according to IMO instruments

Not available.

## Section 15. Regulatory information

### U.S. Federal regulations

**United States inventory (TSCA 8b)** All components are active or exempted.

### Other regulations

**Australia inventory (AIC)** All components are listed or exempted.

**Canada inventory** All components are listed or exempted.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (CSCL)** All components are listed or exempted.

**Korea inventory (KECI)** All components are listed or exempted.

**Philippines inventory (PICCS)** All components are listed or exempted.

**Taiwan Chemical Substances Inventory (TCSI)** All components are listed or exempted.

**REACH Status** For the REACH status of this product please consult your company contact, as identified in Section 1.

## Section 16. Other information

### History

**Date of issue/Date of revision** 01/04/2022.

**Date of previous issue** 01/04/2022.

**Prepared by** Product Stewardship

### Key to abbreviations

ACGIH = American Conference of Industrial Hygienists  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
CAS Number = Chemical Abstracts Service Registry Number  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OEL = Occupational Exposure Limit  
SDS = Safety Data Sheet  
STEL = Short term exposure limit  
TWA = Time weighted average  
UN = United Nations  
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.  
Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Indicates information that has changed from previously issued version.

### Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.

Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be

## Section 16. Other information

*taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.*



**Chemical Name:** Free Penetrant and Release Agent

**Manufacturer:** Certified

**Container size:** 12oz.

**Location:** VLA

**Disposal:** Place empty container in trash.

# **MATERIAL SAFETY DATA SHEET**

## **SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: FREE

Manufacturer's Product Code: 5068

Other Names: Hydrocarbon based rust loosening aerosol.

Major Recommended Uses: As a rust loosening spray for rusty nuts and bolts and other metal pieces.

Supplier's Details: CERTIFIED LABORATORIES

Address: 114 SIDCO INDUSTRIAL ESTATE  
AMBATTUR, CHENNAI – 600 098

Telephone Number: 44 – 2635 0176 / 7

Fax Number: 44 – 2635 0175

E-mail: nchindia@bsnl.in

Emergency Telephone Number: 44 – 2635 0176 / 7

Date of Issue: September 2007

## **SECTION 2 – HAZARDS IDENTIFICATION**

Hazard Classification: NOT classified as hazardous according to the criteria of NOHSC.

Dangerous Goods Class & Sub-risk: Class 2.1, no sub-risk.

Poisons Schedule: None allocated.

Risk Phrases: Flammable.  
Repeated exposure may cause skin dryness or cracking.  
Vapours may cause drowsiness and dizziness.

Safety Phrases: Keep out of reach of children  
Keep away from sources of ignition - no smoking.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## **SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS**

### **Ingredients**

| Chemical Entity                              | CAS No | Proportion | Synonyms |
|--|--------|------------|----------|
| 'INGREDIENTS DETERMINED NOT TO BE HAZARDOUS' |        | 100%       |          |

## **SECTION 4 – FIRST AID MEASURES**

Skin: Wash affected areas with plenty of soap and water for several minutes. Seek medical attention if irritation develops.

Eye: Rinse eyes with water for 15-minutes. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion: Give 3-4 glasses of water, but do NOT induce vomiting. If vomiting occurs, give fluids again. Seek medical attention if discomfort occurs.

First Aid Facilities: General eyewash.

Advice to Doctor: There is no specific antidote. Treat the patient symptomatically.

Additional Information: Gastric lavage is indicated. Do not induce vomiting. Chronic poisoning has produced secondary anaemia, leucocytosis and a cloudy swelling and fatty degradation of the viscera. Primary routes of entry are via inhalation and absorption.

## **SECTION 5 – FIRE FIGHTING MEASURES**

Suitable Extinguishing Media: In the event of a fire, powder, foam, CO<sub>2</sub> and water spray are the recommended extinguishing agents.

Special Protective Equipment and Precautions for Fire Fighters: Fire fighters should wear self-contained breathing apparatus and full protective gear.

Fire/Explosive Hazards: Vapours are heavier than air and may travel to distant and/or low-lying sources of ignition and flashback. Product may produce a floating fire hazard as liquid floats on water.

Hazchem Code: 2Y

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

Wear appropriate protective clothing.

Methods and Materials for Containment and Clean Up: Due to the nature of aerosol packaging, a large spill is unlikely. For a small spill, ventilate the area and absorb with an inert material. Dispose of waste in a closed, labelled container in accordance with local, state and Commonwealth laws. Typical disposal is to wrap the empty aerosol container in several layers of newspaper and dispose of in the garbage. Do not puncture or incinerate the can.

## **SECTION 7 – HANDLING AND STORAGE**

Precautions for Safe Handling: Observe precautions stated on product label, and follow industry safety regulations. Eating and smoking should be prohibited where the preparation is used. Use with caution around heat, sparks, pilot lights, static electricity and open flame.

Conditions for Safe Storage: Store indoors in the in original container. Store in a dry, well-ventilated area. Store below 49°C.

## **SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Standards: Not established for this mixture. The exposure limits for individual components follow:

|                            |  |
|----------------------------|--|
| Ethyl acetate:             | TWA - 200ppm; 720mg/m <sup>3</sup> ;STEL - 400ppm; 1440mg/m <sup>3</sup> |
| Propane/butane propellant: | TLV TWA – 800ppm; 1900mg/m <sup>3</sup>                                  |

Engineering Controls: General exhaust is usually adequate, although local ventilation is recommended to control exposure from operations that can generate mists or vapours. Minimise use in confined spaces.

Personal Protective Equipment:

Eye/Face Protection: Wear safety glasses or solvent resistant mask if the method of use presents the likelihood of eye contact. AS1336 and AS/NZS1337 should be consulted for information on eye protection.

Skin Protection: Neoprene or nitrile rubber gloves should be worn if repeated or prolonged skin contact is likely.

Respiratory Protection: None required under normal conditions of use. If misting is likely to occur, or if used in confined or poorly ventilated areas where exposure will be above the TLV, an approved

organic vapour respirator meeting the requirements outlined in AS/NZS 1715 and AS/NZS 1716 should be used.

## **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

|                            |   |
|----------------------------|---|
| Appearance:                | Clear to amber liquid with a vinegar odour. |
| pH:                        | Not applicable                              |
| Vapour Pressure:           | Not available                               |
| Boiling Point:             | 72°C  |
| Melting Point:             | Not applicable                              |
| Solubility in Water (g/L): | Insoluble                                   |
| Specific Gravity:          | 0.87 (At 25 °C ; water = 1)                 |
| Flashpoint:                | 27°C  |
| Flashpoint Method:         | TAG Closed Cup                              |
| Flammability Limits:       | LEL: 2.2; UEL: 11.0                         |
| % Volatiles by Volume:     | 50.0%                                       |
| Evaporation Rate:          | 1.0 (BU A/C = 1)                            |

## **SECTION 10 – STABILITY AND REACTIVITY**

Stability: Stable.

Hazardous Polymerisation: Will not occur.

Conditions/Materials to Avoid: Avoid heat, hot surfaces, sparks, and open flames.

Keep away from strong oxidising agents such as chlorine bleach, concentrated hydrogen peroxide, dichromates, permanganates, and potassium hypochlorite; acids, bases, silica gel, potassium t-butoxide, oleum, nitrates, lithium tetrahydroaluminate, lithium aluminium hydride, chromium trioxide, chlorosulfonic acid, 2-chloromethylfuran, amines, and alumina.

Hazardous Decomposition Products: Oxides of carbon – carbon monoxide under extreme heat; oxides of nitrogen, sodium, and sulphur; aldehydes.

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

Health Effects:

Acute - Swallowed: May cause irritation with possible nausea, cramps, vomiting and diarrhoea.

Acute - Eye: May cause irritation seen as tearing, redness, and a burning sensation. Blurred vision may result.

Acute - Skin: May cause irritation seen as itching and redness.

Acute - Inhaled: May cause respiratory irritation seen as coughing and sneezing. Inhalation of large amounts may cause dizziness, headache and other central nervous system effects.

Chronic: Due to the use pattern of this product, the likelihood of any chronic effects occurring is remote. Medical conditions aggravated by exposure are pre-existing respiratory and skin conditions such as asthma, emphysema, and dermatitis; pre-existing blood, cardiovascular, liver, and kidney diseases. May cause corneal clouding, dermatitis or even a narcotic effect and also congestion in the liver and kidneys.

Target Organs: Central nervous system, lungs, kidneys and liver.

## **SECTION 12 – ECOLOGICAL INFORMATION**

No specific toxicology data on this product is available. When used as indicated, no adverse environmental effects are foreseen. Avoid contaminating waterways.

Persistence/Degradability: Not readily biodegradable; slowly biodegradable in aerobic conditions.

Mobility in Soil: Not soluble in water.

### **SECTION 13 – DISPOSAL CONSIDERATIONS**

Do not incinerate or puncture aerosol cans. If aerosol can develops a leak, allow to fully discharge before disposal. Prevent disposal in sewers and waterways. Normally suitable for disposal at approved land waste site, but review Commonwealth, State and local government requirements prior to disposal.

### **SECTION 14 – TRANSPORT INFORMATION**

|                                 |                             |
|---------------------------------|-----------------------------|
| <u>UN Number:</u>               | UN1950                      |
| <u>UN Proper Shipping Name:</u> | Aerosol                     |
| <u>Transport Hazard Class:</u>  | ADG Class 2.1, no sub-risk. |
| <u>Packaging Group:</u>         | Not applicable.             |
| <u>Hazchem Code:</u>            | 2Y                          |

### **SECTION 15 - REGULATORY INFORMATION**

Poisons Schedule: None allocated ;

### **SECTION 16 – OTHER INFORMATION**

1<sup>st</sup> update of 16-heading MSDS – added DG pictogram to Section 15.

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The product must not be used for any purposes other than those specified in Section 1 without first obtaining written handling instructions. CERTIFIED assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such non-recommended use, storage or disposal of the product.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.



## Safety Data Sheet

**24 Hour Emergency Phone Numbers**  
**Medical/Poison Control:**  
 In U.S.: Call 1-800-222-1222

**Outside U.S.: Call your local poison control center**

**Transportation/National Response Center:**

**1-800-535-5053**  
**1-352-323-3500**

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

### 1. Identification

|                            |   |                           |                                      |
|----------------------------|---|---------------------------|--------------------------------------|
| <b>Product Name:</b>       | Original Contact Cement Gel   | <b>Revision Date:</b>     | 1/31/2020                            |
| <b>Product UPC Number:</b> | 070798253124, 070798253162  | <b>Supersedes Date:</b>   | 6/19/2015                            |
| <b>Manufacturer:</b>       | DAP Products Inc.<br>2400 Boston Street Suite 200<br>Baltimore, MD 21224-4723<br>888-327-8477 (non - emergency matters) | <b>Product Use/Class:</b> | Adhesive                             |
|                            | SDS Coordinator: MSDS@dap.com   | <b>SDS No:</b>            | 00030536001                          |
|                            | Emergency Telephone:<br>Transportation: 1-800-535 -5053<br>1-352-323-3500<br>Poison Control: 1-800-222-1222             | <b>Preparer:</b>          | Regulatory and Environmental Affairs |

### 2. Hazards Identification

#### GHS Classification

Acute Tox. 4 Inhalation, Carc. 1B, Eye Irrit. 2, Flam. Liq. 1, Muta. 1B, Skin Irrit. 2, STOT RE 2, STOT SE 3 NE, STOT SE 3 RTI

#### Symbol(s) of Product



#### Signal Word

Danger

#### Possible Hazards

4% of the mixture consists of ingredients of unknown acute toxicity

#### GHS HAZARD STATEMENTS

Flammable Liquid, category 1

H224

Extremely flammable liquid and vapour.

|  |      |  |
|--|------|--|
| Skin Irritation, category 2            | H315 | Causes skin irritation.  |
| Eye Irritation, category 2             | H319 | Causes serious eye irritation.                                     |
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled.  |
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation.                                  |
| STOT, single exposure, category 3, NE  | H336 | May cause drowsiness or dizziness.                                 |
| Germ Cell Mutagenicity, category 1B    | H340 | May cause genetic defects.   |
| Carcinogenicity, category 1B           | H350 | May cause cancer.  |
| STOT, repeated exposure, category 2    | H373 | May cause damage to organs through prolonged or repeated exposure. |

**GHS LABEL PRECAUTIONARY STATEMENTS**

|                |  |
|----------------|--|
| P102           | Keep out of reach of children.   |
| P201           | Obtain special instructions before use.  |
| P210           | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.                                   |
| P260           | Do not breathe dust/fume/gas/mist/vapours/spray.   |
| P262           | Do not get in eyes, on skin, or on clothing.   |
| P264           | Wash thoroughly after handling.  |
| P271           | Use only outdoors or in a well-ventilated area.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.                              |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313      | IF exposed or concerned: Get medical advice/attention.   |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P321           | Specific treatment (see ... on this label).  |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P362           | Take off contaminated clothing.  |
| P370+P378      | In case of fire: Use... to extinguish.   |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.   |
| P403+P235      | Store in a well-ventilated place. Keep cool.   |
| P405           | Store locked up.   |
| P501           | Dispose of contents/container to ...   |

**GHS SDS PRECAUTIONARY STATEMENTS**

|      |   |
|------|---|
| P240 | Ground/bond container and receiving equipment.                      |
| P241 | Use explosion-proof electrical/ventilating/lighting/.../ equipment. |
| P242 | Use only non-sparking tools.  |
| P243 | Take precautionary measures against static discharge.               |

**3. Composition/Information on Ingredients**

| <u>Chemical Name</u>   | <u>CAS-No.</u> | <u>Wt. %</u> | <u>GHS Symbols</u> | <u>GHS Statements</u>        |
|--|----------------|--------------|--------------------|------------------------------|
| Toluene  | 108-88-3       | 30-60        | GHS02-GHS07-GHS08  | H225-304-315-332-335-336-373 |
| Distillates (petroleum), light distillate hydrotreating process, low-boiling | 68410-97-9     | 10-30        | GHS06-GHS07-GHS08  | H304-312-315-331-336-340-350 |
| Methyl ethyl ketone (MEK)  | 78-93-3        | 7-13         | GHS02-GHS07        | H225-319-332-336             |
| Petroleum hydrocarbon resin  | 64742-16-1     | 1-5          | No Information     | No Information               |
| Hydrogenated castor oil  | 8001-78-3      | 0.5-1.5      | GHS06              | H312-330                     |
| Magnesium oxide  | 1309-48-4      | 0.5-1.5      | No Information     | No Information               |

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

**4. First-aid Measures**

**FIRST AID - INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. NOTE: Only trained personnel should administer artificial respiration or give oxygen.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing. DO NOT try to peel the solidified material from the skin or use solvents or thinners to dissolve it. The

use of vegetable oil or mineral oil is recommended for removal of this material from the skin. Flush exposed area with water while removing contaminated clothing. Get medical attention if irritation persists. To remove from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water.

**FIRST AID - EYE CONTACT:** If material gets into eyes, flush with water immediately for 15 minutes. Consult a physician.

**FIRST AID - INGESTION:** If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

## 5. Fire-fighting Measures

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors may form explosive mixtures with air. Containers may explode if exposed to extreme heat. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces. Cool fire-exposed containers using water spray.

**EXTINGUISHING MEDIA:** Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Spray or Fog, Water

## 6. Accidental Release Measures

**ENVIRONMENTAL MEASURES:** No Information

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Scrape up dried material and place into containers.

## 7. Handling and Storage

**HANDLING:** KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Remove all sources of ignition. Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Avoid heat, sparks and open flames. Wear appropriate personal protection. Avoid breathing vapor and contact with eyes, skin and clothing. Use in well ventilated area. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion. Wash thoroughly after handling. Do not use in areas where static sparks may be generated. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal. Construction and repair activities can adversely affect indoor air quality. Consult with occupants or a representative (i.e. maintenance, building manager, industrial hygienist, or safety officer) to determine ways to minimize impact.

**STORAGE:** Store away from sources of ignition and heat. Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Keep containers tightly closed.

## 8. Exposure Controls/Personal Protection

### Ingredients with Occupational Exposure Limits

| <u>Chemical Name</u>   | <u>ACGIH TLV-TWA</u>         | <u>ACGIH-TLV STEL</u> | <u>OSHA PEL-TWA</u>        | <u>OSHA PEL-CEILING</u> |
|--|------------------------------|-----------------------|----------------------------|-------------------------|
| Toluene  | 20 ppm TWA                   | N.E.                  | 200 ppm TWA                | 300 ppm Ceiling         |
| Distillates (petroleum), light distillate hydrotreating process, low-boiling | N.E.                         | N.E.                  | N.E.                       | N.E.                    |
| Methyl ethyl ketone (MEK)  | 200 ppm TWA                  | 300 ppm STEL          | 200 ppm TWA, 590 mg/m3 TWA | N.E.                    |
| Petroleum hydrocarbon resin  | N.E.                         | N.E.                  | N.E.                       | N.E.                    |
| Hydrogenated castor oil  | N.E.                         | N.E.                  | N.E.                       | N.E.                    |
| Magnesium oxide  | 10 mg/m3 TWA                 | N.E.                  | 15 mg/m3 TWA               | N.E.                    |
|  | inhalable particulate matter |                       | fume, total particulate    |                         |

**Further Advice:** MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation  
Sk = Skin Sensitizer N.E. = Not Established

**Personal Protection**

**RESPIRATORY PROTECTION:** A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear and appropriate, properly fitted respirator (NIOSH approved) during and after application. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



**SKIN PROTECTION:** Solvent-resistant gloves.



**EYE PROTECTION:** Goggles or safety glasses with side shields.



**OTHER PROTECTIVE EQUIPMENT:** Provide eyewash and solvent impervious apron if body contact may occur.



**HYGIENIC PRACTICES:** Remove and wash contaminated clothing before re-use.

## 9. Physical and Chemical Properties

|                                       |                             |   |                           |
|---------------------------------------|-----------------------------|---|---------------------------|
| <b>Appearance:</b>                    | Tan                         | <b>Physical State:</b>                    | Thick Liquid              |
| <b>Odor:</b>                          | Strong Solvent              | <b>Odor Threshold:</b>                    | Not Established           |
| <b>Density, g/cm3:</b>                | 0.88 - 0.88                 | <b>pH:</b>                                | Not Applicable            |
| <b>Freeze Point, °C:</b>              | Not Established             | <b>Viscosity (mPa.s):</b>                 | Not Established           |
| <b>Solubility in Water:</b>           | No Information              | <b>Partition Coeff., n-octanol/water:</b> | Not Established           |
| <b>Decomposition Temperature, °C:</b> | Not Established             | <b>Explosive Limits, %:</b>               | N.E. - N.E.               |
| <b>Boiling Range, °C:</b>             | N.E. - N.E.                 | <b>Auto-Ignition Temperature, °C</b>      | Not Established           |
| <b>Minimum Flash Point, °C:</b>       | -6.1                        | <b>Vapor Pressure, mmHg:</b>              | Not Established           |
| <b>Evaporation Rate:</b>              | Not Established             | <b>Flash Method:</b>                      | Pensky-Martens Closed Cup |
| <b>Vapor Density:</b>                 | Not Established             | <b>Flammability, NFPA:</b>                | Flammable Liquid Class IA |
| <b>Combustible Dust:</b>              | Does not support combustion |   |                           |

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

## 10. Stability and Reactivity

**STABILITY:** Stable under recommended storage conditions.

**CONDITIONS TO AVOID:** Keep away from open flames, hot surfaces and sources of ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Avoid contact with skin, eyes and clothing. Do not smoke.

**INCOMPATIBILITY:** Open flames, hot surfaces and sources of ignition. Keep away from strong oxidizing agents, heat and open flames. Exothermic reaction with strong acids. Strong oxidizers, alkali metals and alkaline earth metals may cause fires or explosions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Normal decomposition products, i.e., COx, NOx.

## 11. Toxicological Information

**EFFECT OF OVEREXPOSURE - INHALATION:** Inhalation of vapors may cause irritation of the nose, throat, lungs and respiratory tract. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss

of consciousness.

**EFFECT OF OVEREXPOSURE - SKIN CONTACT:** Harmful if absorbed through the skin. May cause skin irritation. Prolonged and repeated skin contact may cause dermatitis, drying and defatting due to the solvent properties.

**EFFECT OF OVEREXPOSURE - EYE CONTACT:** May cause eye irritation. Signs and symptoms may include: pain, tears, swelling, redness and blurred vision.

**EFFECT OF OVEREXPOSURE - INGESTION:** Harmful or fatal if swallowed. May cause gastrointestinal disturbances with dizziness and central nervous system depression. If ingested, may cause depressed respiration. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed. Aspiration of material into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal.

**CARCINOGENICITY:** No Information

**EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS:** Repeated or prolonged exposure may cause skin, respiratory, kidney and liver damage. May cause kidney and liver damage as well as developmental and reproductive toxicity. Prolonged or repeated inhalation of solvent vapors may cause irregular heartbeat. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Symptoms include: loss of memory, loss of intellectual ability and loss of coordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Overexposure or misuse of toluene can cause liver, kidney, and brain damage as well as cardiac abnormalities. There have been cases of aplastic anemia from toluene in industrial exposures (ACGIH, 1992). Increased coagulation time and reduced clotting factors have also been found, which are indicators of damage to the bone marrow (Clayton & Clayton, 1994). Symptoms include: loss of memory, loss of intellectual ability and loss of coordination.

**PRIMARY ROUTE(S) OF ENTRY:** Skin Contact, Skin Absorption, Inhalation

#### Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

| <u>CAS-No.</u> | <u>Chemical Name</u>   | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|--|------------------|--------------------|-------------------|
| 108-88-3       | Toluene  | 2600 mg/kg Rat   | 12000 mg/kg Rabbit | 12.5 mg/L Rat     |
| 68410-97-9     | Distillates (petroleum), light distillate hydrotreating process, low-boiling | 5170 mg/kg Rat   | 1900 mg/kg Rabbit  | >4.96 mg/L Rat    |
| 78-93-3        | Methyl ethyl ketone (MEK)  | 2483 mg/kg Rat   | 5000 mg/kg Rabbit  | 34.5 mg/l Rat     |
| 64742-16-1     | Petroleum hydrocarbon resin  | N.I.             | N.I.               | N.I.              |
| 8001-78-3      | Hydrogenated castor oil  | >10000 mg/kg Rat | 2000 mg/kg Rat     | > 1.86 mg/L Rat   |
| 1309-48-4      | Magnesium oxide  | >3870 mg/kg Rat  | N.I.               | N.I.              |

N.I. = No Information

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Ecological injuries are not known or expected under normal use.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Residues and spilled material are hazardous waste due to ignitability. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Liquids cannot be disposed of in a landfill. Do not flush into surface water or sanitary sewer system. Do not empty into drains. Do not re-use empty containers. The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container.

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Prevent product from entering drains. Soak up with inert absorbent material and dispose of as hazardous waste. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Scrape up dried material and place into containers.

## 14. Transport Information

**DOT UN/NA Number:** UN1133  
**DOT Proper Shipping Name:** Adhesives, containing a flammable liquid  
**DOT Technical Name:** N.A.  
**DOT Hazard Class:** 3 Flammable liquid  
**Hazard SubClass:** N.A.  
**Packing Group:** No Information

## 15. Regulatory Information

### SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

### TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

## 16. Other Information

**Revision Date:** 1/31/2020 **Supersedes Date:** 6/19/2015

**Reason for revision:**

- Revision Description Changed
- Product Composition Changed
- Substance and/or Product Properties Changed in Section(s):
  - 01 - Product Information
  - 02 - Hazards Identification
  - 05 - Flammability Information
  - 08 - Exposure Controls/Personal Protection
  - 09 - Physical & Chemical Information
  - 11 - Toxicological Information
  - 13 - Disposal Information
  - 14 - Transportation Information
  - 15 - Regulatory Information
  - 16 - Other Information
- Substance Chemical Name Changed
- Substance Regulatory CAS Number Changed
- Substance Hazardous Flag Changed
- Substance Hazard Threshold % Changed
- Revision Statement(s) Changed

**Datasheet produced by:** Regulatory Department

### HMIS Ratings:

| Health: | Flammability: | Reactivity: | Personal Protection: |
|---------|---------------|-------------|----------------------|
| 3*      | 4             | 1           | X                    |

VOC Less Water Less Exempt Solvent, g/L: 702.8

VOC Material, g/L: 702

VOC as Defined by California Consumer Product Regulation, Wt/Wt%: 65.92

VOC Actual, Wt/Wt%: 79.5

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

|      |   |
|------|---|
| H225 | Highly flammable liquid and vapour.           |
| H304 | May be fatal if swallowed and enters airways. |

|      |  |
|------|--|
| H312 | Harmful in contact with skin.                                      |
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.                                     |
| H330 | Fatal if inhaled.  |
| H331 | Toxic if inhaled.  |
| H332 | Harmful if inhaled.  |
| H335 | May cause respiratory irritation.                                  |
| H336 | May cause drowsiness or dizziness.                                 |
| H340 | May cause genetic defects.   |
| H350 | May cause cancer.  |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**Icons for GHS Pictograms shown in Section 3 describing each ingredient:**

GHS02



GHS06



GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

## SECTION 1. IDENTIFICATION

Product name : DOW CORNING(R) 3140 RTV COATING

Product code : 000000000001015788

**Manufacturer or supplier's details**

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road  
Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900  
CHEMTREC : (800) 424-9300**Recommended use of the chemical and restrictions on use**Recommended use : Adhesive, binding agents  
Electrical industry and electronics

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**

Reproductive toxicity : Category 2

**GHS label elements**

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H361f Suspected of damaging fertility.

Precautionary Statements :

**Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

**Storage:**  
P405 Store locked up.

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
Date of first issue: 02/10/2015

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture  
Chemical nature : Silicone elastomer

**Hazardous ingredients**

| Chemical name                             | CAS-No.    | Concentration (% w/w) |
|---|------------|-----------------------|
| Hexamethyldisilazane reaction with Silica | 68909-20-6 | $\geq 10$ - $< 20$    |
| Methyltrimethoxysilane                    | 1185-55-3  | $\geq 1$ - $< 5$      |
| Octamethylcyclotetrasiloxane              | 556-67-2   | $\geq 0.1$ - $< 1$    |
| Methanol                                  | 67-56-1    | $\geq 0.1$ - $< 1$    |

**SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.  
Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention.  
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : Suspected of damaging fertility.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Notes to physician : Treat symptomatically and supportively.

**SECTION 5. FIRE-FIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : None known.
- Specific hazards during fire fighting : Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides  
Silicon oxides  
Formaldehyde  
Nitrogen oxides (NO<sub>x</sub>)
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material.  
For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

## SECTION 7. HANDLING AND STORAGE

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Avoid inhalation of vapor or mist.  
Do not swallow.  
Avoid contact with eyes.  
Avoid prolonged or repeated contact with skin.  
Handle in accordance with good industrial hygiene and safety practice.  
Keep away from water.  
Protect from moisture.  
Take care to prevent spills, waste and minimize release to the environment.
- Conditions for safe storage : Keep in properly labeled containers.  
Store in accordance with the particular national regulations.
- Materials to avoid : Do not store with the following product types:  
Strong oxidizing agents

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

| Ingredients                               | CAS-No.    | Value type<br>(Form of exposure) | Control parameters / Permissible concentration    | Basis     |
|---|------------|----------------------------------|---|-----------|
| Hexamethyldisilazane reaction with Silica | 68909-20-6 | TWA (Dust)                       | 20 Million particles per cubic foot (Silica)      | OSHA Z-3  |
|   |            | TWA (Dust)                       | 80 mg/m <sup>3</sup> / %SiO <sub>2</sub> (Silica) | OSHA Z-3  |
| Methyltrimethoxysilane                    | 1185-55-3  | TWA                              | 7.5 ppm   | DCC OEL   |
| Octamethylcyclotetrasiloxane              | 556-67-2   | TWA                              | 10 ppm  | DCC OEL   |
|   |            | TWA                              | 10 ppm  | US WEEL   |
| Methanol                                  | 67-56-1    | TWA                              | 200 ppm   | ACGIH     |
|   |            | STEL                             | 250 ppm   | ACGIH     |
|   |            | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>                  | NIOSH REL |
|   |            | ST                               | 250 ppm<br>325 mg/m <sup>3</sup>                  | NIOSH REL |
|   |            | TWA                              | 200 ppm   | OSHA Z-1  |

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
 Date of first issue: 02/10/2015

|  |  |  |                       |  |
|--|--|--|-----------------------|--|
|  |  |  | 260 mg/m <sup>3</sup> |  |
|--|--|--|-----------------------|--|

**Occupational exposure limits of decomposition products**

| Ingredients | CAS-No. | Value type<br>(Form of exposure) | Control parameters / Permissible concentration | Basis     |
|-------------|---------|----------------------------------|--|-----------|
| Methanol    | 67-56-1 | TWA                              | 200 ppm  | ACGIH     |
|             |         | STEL                             | 250 ppm  | ACGIH     |
|             |         | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>               | NIOSH REL |
|             |         | ST                               | 250 ppm<br>325 mg/m <sup>3</sup>               | NIOSH REL |
|             |         | TWA                              | 200 ppm<br>260 mg/m <sup>3</sup>               | OSHA Z-1  |

**Biological occupational exposure limits**

| Ingredients | CAS-No. | Control parameters | Biological specimen | Sampling time  | Permissible concentration | Basis     |
|-------------|---------|--------------------|---------------------|--|---------------------------|-----------|
| Methanol    | 67-56-1 | Methanol           | Urine               | End of shift (As soon as possible after exposure ceases) | 15 mg/l                   | ACGIH BEI |

**Engineering measures** : Processing may form hazardous compounds (see section 10).  
 Ensure adequate ventilation, especially in confined areas.  
 Minimize workplace exposure concentrations.

**Personal protective equipment**

**Respiratory protection** : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

**Hand protection**  
**Material**

: Chemical-resistant gloves

**Remarks**

: For prolonged or repeated contact use protective gloves. Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

- Eye protection : Wear the following personal protective equipment:  
Safety glasses
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.  
These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.  
For further information regarding the use of silicones / organic oils in consumer aerosol applications, please refer to the guidance document regarding the use of these type of materials in consumer aerosol applications that has been developed by the silicone industry ([www.SEHSC.com](http://www.SEHSC.com)) or contact the Dow Corning customer service group.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : white, translucent
- Odor : slight
- Odor Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Initial boiling point and boiling range : > 65 °C
- Flash point : > 101.1 °C  
Method: closed cup
- Evaporation rate : No data available
- Flammability (solid, gas) : Not applicable
- Upper explosion limit : No data available
- Lower explosion limit : No data available

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

|  |   |  |
|--|---|--|
| Vapor pressure                         | : | No data available  |
| Relative vapor density                 | : | No data available  |
| Relative density                       | : | 1.05   |
| Solubility(ies)                        | : |  |
| Water solubility                       | : | No data available  |
| Partition coefficient: n-octanol/water | : | No data available  |
| Autoignition temperature               | : | No data available  |
| Decomposition temperature              | : | No data available  |
| Viscosity                              | : |  |
| Viscosity, dynamic                     | : | 300 Poise  |
| Explosive properties                   | : | Not explosive  |
| Oxidizing properties                   | : | The substance or mixture is not classified as oxidizing. |
| Molecular weight                       | : | No data available  |

**SECTION 10. STABILITY AND REACTIVITY**

|                                    |   |  |
|------------------------------------|---|--|
| Reactivity                         | : | Not classified as a reactivity hazard.   |
| Chemical stability                 | : | Stable under normal conditions.  |
| Possibility of hazardous reactions | : | Use at elevated temperatures may form highly hazardous compounds.<br>Can react with strong oxidizing agents.<br>When heated to temperatures above 180 °C (356 °F) in the presence of air, trace quantities of formaldehyde may be released.<br>Adequate ventilation is required.<br>See OSHA formaldehyde standard, 29 CFR 1910.1048<br>Hazardous decomposition products will be formed upon contact with water or humid air.<br>Hazardous decomposition products will be formed at elevated temperatures. |
| Conditions to avoid                | : | Exposure to moisture.  |
| Incompatible materials             | : | Oxidizing agents<br>Water  |

**Hazardous decomposition products**

|                                 |   |          |
|---------------------------------|---|----------|
| Contact with water or humid air | : | Methanol |
|---------------------------------|---|----------|

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Thermal decomposition : Formaldehyde

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Acute oral toxicity : LD50 (Rat): 12.3 ml/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Information taken from reference works and the literature.

Acute inhalation toxicity : LC50 (Rat): > 42.1 mg/l  
Exposure time: 6 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on test data

Acute dermal toxicity : LD50 (Rabbit): > 9,500 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on test data

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

**Octamethylcyclotetrasiloxane:**

- Acute oral toxicity : LD50 (Rat): > 4,800 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on test data
- Acute inhalation toxicity : LC50 (Rat): 2975 ppm  
Exposure time: 4 h  
Test atmosphere: vapor  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on test data
- Acute dermal toxicity : LD50 (Rabbit): > 2.5 ml/kg  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on test data

**Methanol:**

- Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment
- Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: Expert judgment  
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI
- Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg  
Method: Expert judgment

**Skin corrosion/irritation**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Assessment: Repeated exposure may cause skin dryness or cracking.

**Methyltrimethoxysilane:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No skin irritation  
Remarks: Based on test data

**Methanol:**

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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Species: Rabbit  
Result: No skin irritation

**Serious eye damage/eye irritation**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rabbit  
Result: No eye irritation  
Remarks: Based on test data

**Methanol:**

Species: Rabbit  
Result: No eye irritation

**Respiratory or skin sensitization****Skin sensitization**

Not classified based on available information.

**Respiratory sensitization**

Not classified based on available information.

**Product:**

Assessment: Does not cause skin sensitization.

Test Type: Buehler Test  
Species: Guinea pig  
Remarks: Based on data from similar materials

**Ingredients:****Methyltrimethoxysilane:**

Assessment: Probability or evidence of low to moderate skin sensitization rate in humans

Test Type: Buehler Test  
Species: Guinea pig  
Remarks: Based on test data

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

**Octamethylcyclotetrasiloxane:**

Assessment: Does not cause skin sensitization.

Test Type: Maximization Test  
Species: Guinea pig  
Remarks: Based on test data

**Methanol:**

Test Type: Maximization Test  
Routes of exposure: Skin contact  
Species: Guinea pig  
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Ingredients:****Hexamethyldisilazane reaction with Silica:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

**Methyltrimethoxysilane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)  
Result: positive  
Remarks: Based on test data

: Test Type: Chromosome aberration test in vitro  
Result: positive  
Remarks: Based on test data

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Ingestion  
Result: negative  
Remarks: Based on test data

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Octamethylcyclotetrasiloxane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on test data

: Test Type: Mutagenicity (in vitro mammalian cytogenetic test)

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Result: negative  
Remarks: Based on test data

: Test Type: Chromosome aberration test in vitro  
Result: negative  
Remarks: Based on test data

: Test Type: In vitro sister chromatid exchange assay in mammalian cells  
Result: negative  
Remarks: Based on test data

: Test Type: DNA damage and repair, unscheduled DNA synthesis in mammalian cells (in vitro)  
Result: negative  
Remarks: Based on test data

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on test data

Test Type: Rodent dominant lethal test (germ cell) (in vivo)  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on test data

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Methanol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Ingredients:****Methanol:**

Species: Mouse

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Application Route: inhalation (vapor)  
Exposure time: 18 Months  
Result: negative

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Suspected of damaging fertility.

**Ingredients:****Methyltrimethoxysilane:**

Effects on fertility : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat, male and female  
Application Route: Ingestion  
Symptoms: No effects on fertility.  
Remarks: Based on test data

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test  
Species: Rat, male and female  
Application Route: Ingestion  
Symptoms: No effects on fetal development.  
Remarks: Based on test data

Reproductive toxicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

**Octamethylcyclotetrasiloxane:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat, male and female  
Application Route: inhalation (vapor)  
Symptoms: Effects on fertility.  
Remarks: Based on test data

Effects on fetal development : Test Type: Prenatal development toxicity study (teratogenicity)  
Species: Rabbit  
Application Route: inhalation (vapor)  
Symptoms: No effects on fetal development.  
Remarks: Based on test data

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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**Methanol:**

Effects on fertility : Test Type: Fertility/early embryonic development  
Species: Mouse  
Application Route: Ingestion  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Mouse  
Application Route: Ingestion  
Result: positive  
Remarks: The effects were seen only at maternally toxic doses.

**STOT-single exposure**

Not classified based on available information.

**Ingredients:****Methanol:**

Target Organs: Eyes, Central nervous system  
Assessment: Causes damage to organs.

**STOT-repeated exposure**

Not classified based on available information.

**Ingredients:****Methyltrimethoxysilane:**

Routes of exposure: inhalation (vapor)  
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Routes of exposure: Ingestion  
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

**Octamethylcyclotetrasiloxane:**

Routes of exposure: Ingestion  
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Routes of exposure: inhalation (vapor)  
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Routes of exposure: Skin contact  
Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

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**Repeated dose toxicity****Ingredients:****Methyltrimethoxysilane:**

Species: Rat  
Application Route: inhalation (vapor)  
Remarks: Based on test data

Species: Rat  
Application Route: Ingestion  
Remarks: Based on test data

**Octamethylcyclotetrasiloxane:**

Species: Rat  
Application Route: Ingestion  
Remarks: Based on test data

Species: Rat  
Application Route: inhalation (vapor)  
Remarks: Based on test data

Species: Rabbit  
Application Route: Skin contact  
Remarks: Based on test data

**Methanol:**

Species: Rat  
NOAEL: 1.06 mg/l  
Application Route: inhalation (vapor)  
Exposure time: 90 Days

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Further information****Ingredients:****Octamethylcyclotetrasiloxane:**

Remarks: Results from a 2 year repeated vapor inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. This finding occurred at the highest exposure dose (700 ppm) only. Studies to date have not demonstrated if these effects occur through pathways that are relevant to humans. Repeated exposure in rats to D4 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

## SECTION 12. ECOLOGICAL INFORMATION

## Ecotoxicity

Ingredients:**Methyltrimethoxysilane:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia sp.): > 100 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 3.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: No toxicity at the limit of solubility.
- EC10 (Pseudokirchneriella subcapitata (green algae)): > 3.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
Remarks: No toxicity at the limit of solubility.
- Toxicity to bacteria : EC50: > 100 mg/l  
Method: OECD Test Guideline 209

**Octamethylcyclotetrasiloxane:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.022 mg/l  
Exposure time: 96 h  
Remarks: No toxicity at the limit of solubility.
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia sp.): > 0.015 mg/l  
Exposure time: 48 h  
Remarks: No toxicity at the limit of solubility.
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): >= 0.0044 mg/l  
Remarks: No toxicity at the limit of solubility.
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): > 0.0079 mg/l  
Exposure time: 21 d  
Remarks: No toxicity at the limit of solubility.

**Ecotoxicology Assessment**

- Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

**Methanol:**

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l  
Exposure time: 96 h

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l  
Exposure time: 200 h

Toxicity to bacteria : IC50: > 1,000 mg/l  
Exposure time: 3 h

**Persistence and degradability****Ingredients:****Methyltrimethoxysilane:**

Stability in water : Degradation half life: 2.2 h pH: 7

**Octamethylcyclotetrasiloxane:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 3.7 %  
Exposure time: 28 d  
Method: OECD Test Guideline 310

Stability in water : Degradation half life: 69.3 - 144 h (24.6 °C) pH: 7  
Method: OECD Test Guideline 111

**Methanol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 95 %  
Exposure time: 20 d

**Bioaccumulative potential****Ingredients:****Methyltrimethoxysilane:**

Partition coefficient: n-octanol/water : log Pow: -2.36

**Octamethylcyclotetrasiloxane:**

Partition coefficient: n-octanol/water : log Pow: 6.48 (25.1 °C)

**Methanol:**

Bioaccumulation : Species: Leuciscus idus (Golden orfe)  
Bioconcentration factor (BCF): < 10

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

Partition coefficient: n-octanol/water : log Pow: -0.77

**Mobility in soil**

No data available

**Other adverse effects****Ingredients:****Octamethylcyclotetrasiloxane:**

Results of PBT and vPvB assessment : Remarks: Octamethylcyclotetrasiloxane (D4) meets the current REACH Annex XIII criteria for PBT and vPvB. In Canada, D4 has been assessed and deemed to meet the PiT criteria. However, D4 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D4 is not biomagnifying in aquatic and terrestrial food webs. D4 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D4 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Resource Conservation and Recovery Act (RCRA) : This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation**

## DOW CORNING(R) 3140 RTV COATING

Version 6.0      Revision Date: 07/14/2016      SDS Number: 1265102-00008      Date of last issue: 04/09/2016  
Date of first issue: 02/10/2015

**49 CFR**

Not regulated as a dangerous good

**SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

| Ingredients | CAS-No. | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|-------------|---------|-----------------------|--------------------------------|
| Methanol    | 67-56-1 | 5000                  | *                              |

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Chronic Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**US State Regulations****Pennsylvania Right To Know**

Dimethyl siloxane, hydroxy-terminated 70131-67-8  
Hexamethyldisilazane reaction with Silica 68909-20-6  
Methanol 67-56-1

**California Prop. 65** WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Methanol 67-56-1

**The ingredients of this product are reported in the following inventories:**

NZIoC All ingredients listed or exempt.

TSCA All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

AICS All ingredients listed or exempt.

IECSC All ingredients listed or exempt.

ENCS/ISHL All components are listed on ENCS/ISHL or exempted from inventory listing.

KECI All ingredients listed, exempt or notified.

PICCS All ingredients listed or exempt.

DSL All chemical substances in this product comply with the CEPA

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

## REACH

For purchases from Dow Corning EU legal entities, all ingredients are currently pre/registered or exempt under REACH. For purchases from non-EU Dow Corning legal entities with the intention to export into EEA please contact your DC representative/local office.

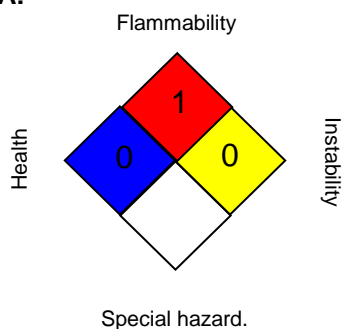
## TCSI

All ingredients listed or exempt.

## SECTION 16. OTHER INFORMATION

## Further information

## NFPA:



## HMIS III:

|                 |    |
|-----------------|----|
| HEALTH          | 0* |
| FLAMMABILITY    | 1  |
| PHYSICAL HAZARD | 0  |

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

## Full text of other abbreviations

|                 |   |
|-----------------|---|
| ACGIH           | : USA. ACGIH Threshold Limit Values (TLV)   |
| ACGIH BEI       | : ACGIH - Biological Exposure Indices (BEI)   |
| DCC OEL         | : Dow Corning Guide   |
| NIOSH REL       | : USA. NIOSH Recommended Exposure Limits  |
| OSHA Z-1        | : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants          |
| OSHA Z-3        | : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts                        |
| US WEEL         | : USA. Workplace Environmental Exposure Levels (WEEL)                                       |
| ACGIH / TWA     | : 8-hour, time-weighted average   |
| ACGIH / STEL    | : Short-term exposure limit   |
| DCC OEL / TWA   | : Time weighted average   |
| NIOSH REL / TWA | : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST  | : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday    |
| OSHA Z-1 / TWA  | : 8-hour time weighted average  |
| OSHA Z-3 / TWA  | : 8-hour time weighted average  |
| US WEEL / TWA   | : 8-hr TWA  |

## DOW CORNING(R) 3140 RTV COATING

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 04/09/2016  |
| 6.0     | 07/14/2016     | 1265102-00008 | Date of first issue: 02/10/2015 |

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 07/14/2016

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

|               |   |
|---------------|---|
| Chemical Name | Not applicable.   |
| CAS No.       | Mixture   |
| Trade Name    | DuPont™ Non-Stick Dry Film Lubricant with Teflon® fluoropolymer - Aerosol |
| Product Code  | None  |

#### Relevant identified uses of the substance or mixture and uses advised against

|                      |           |
|----------------------|-----------|
| Identified Use(s)    | Lubricant |
| Uses Advised Against | None      |

|                        |  |
|------------------------|--|
| Company Identification | Finish Line Technologies, Inc.<br>50 Wireless Blvd.<br>Hauppauge, NY 11788 |
|------------------------|--|

|                           |  |
|---------------------------|--|
| Telephone                 | (631) 666-7300   |
| E-Mail (competent person) | <a href="mailto:SDSinfo@finishlineusa.com">SDSinfo@finishlineusa.com</a> |

#### Emergency telephone number

|                     |  |
|---------------------|--|
| Emergency Phone No. | Medical Emergency: PROSAR 24 hr: 1-800-217-5157 / 1-651-523-0304 |
|---------------------|--|

Transportation Emergency: CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; Asp. Tox. 1

#### Label elements

Hazard Symbol



**DANGER**

Signal Word(s)

Hazard Statement(s)

Extremely flammable aerosol.  
Pressurized container: May burst if heated.  
May be fatal if swallowed and enters airways.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause drowsiness or dizziness.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
Avoid breathing spray.  
Wash hands and exposed skin thoroughly after handling:



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Use only outdoors or in a well-ventilated area.

Keep out of reach of children.

Other hazards

None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s)              | % wt.   | CAS No.     |
|--------------------------------------|---------|-------------|
| Isopropanol                          | 40 - 50 | 64-67-0     |
| Heptane, branched, cyclic and linear | 20 - 30 | 426260-76-6 |
| Propane                              | 5 - 15  | 74-98-6     |
| n-Butane                             | 5 - 15  | 106-97-8    |

Additional Information - None

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation

Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

Skin Contact

Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention. Take off contaminated clothing and wash it before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion

Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

May be fatal if swallowed and enters airways.

**Indication of any immediate medical attention and special treatment needed**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

-Unsuitable Extinguishing Media

Do not use water jet.

**Special hazards arising from the substance or mixture**

Highly flammable vapor (flash point below 23°C).

**Advice for fire-fighters**

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Wear protective gloves/eye protection. Avoid breathing spray. Use product in a well-ventilated area only.

**Environmental precautions**

Prevent liquid entering sewers, basements and workpits.

**Methods and material for containment and cleaning up**

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

**Reference to other sections**

None

**Additional Information**

None

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Use product in a well-ventilated area only. Avoid breathing spray.

**Conditions for safe storage, including any incompatibilities**

-Storage temperature

Keep out of reach of children. Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F. Keep in a cool, well ventilated place. Keep container tightly closed.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidising chemicals.

**Specific end use(s)**

Lubricant

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

| SUBSTANCE.                           | CAS No.     | (8hr TWA)  |                        | STEL       |             | Note:      |
|--------------------------------------|-------------|------------|------------------------|------------|-------------|------------|
|                                      |             | PEL (OSHA) | TLV (ACGIH)            | PEL (OSHA) | TLV (ACGIH) |            |
| Heptane, branched, cyclic and linear | 426260-76-6 | 500 ppm*   | 1500 mg/m <sup>3</sup> | -----      | -----       | *n-heptane |
| Isopropanol                          | 67-63-0     | 400 ppm    | 200 ppm                | -----      | 400 ppm     | -----      |
| n-Butane                             | 106-97-8    | -----      | 250 ppm                | -----      | -----       | -----      |
| Propane                              | 74-98-6     | 1000 ppm   | Aspyx.#                | -----      | -----       | #          |

#Assure minimum oxygen content of work atmosphere.

**Recommended monitoring method**

NIOSH 1500 (hydrocarbons, B.P. 36 - 216 °C); NIOSH 1400 (Alcohols I)

**Exposure controls**



## DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

### Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

### Personal protection equipment

#### Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

#### Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber). Check with protective equipment manufacturer's data.

#### Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

#### Thermal hazards

Not normally required.

### Environmental Exposure Controls

Avoid release to the environment.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance

Aerosol spray

Color.

White (Translucent)

Odor

Petroleum spirit

Odor Threshold (ppm)

Not available

pH (Value)

Not available

Melting Point (°C) / Freezing Point (°C)

Not available

Boiling point/boiling range (C):

Not available

Flash Point (°C)

-104 (Propane)

Evaporation Rate

Not available

Flammability (solid, gas)

Highly flammable

Explosive Limit Ranges

2.1% - 9.5% v/v (Propane)

Vapour pressure (Pascal)

ca 95 x 10<sup>4</sup> (Propane)

Vapour Density (Air=1)

ca 1.56 @ 0°C (Propane)

Density (g/ml)

Not available

Solubility (Water)

Not available

Solubility (Other)

Not available

Partition Coefficient (n-Octanol/water)

Not available

Auto Ignition Point (°C)

450 (Propane)

Decomposition Temperature (°C)

Not available

Kinematic Viscosity (cSt)

<20 @ 40 °C

Explosive properties

Not explosive.

Oxidizing properties

Not oxidizing.

### Other information

Not available



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SECTION 10: STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | Stable under normal conditions.                    |
| Chemical stability                 | Stable.  |
| Possibility of hazardous reactions | None anticipated.                                  |
| Conditions to avoid                | Avoid contact with heat and ignition sources.      |
| Incompatible materials             | Strong oxidising agents                            |
| Hazardous decomposition product(s) | Carbon monoxide, Carbon dioxide, Acid smoke, Other |

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact

Toxicity - Substances in preparations / mixtures

**Information on toxicological effects**

Isopropanol (CAS# 67-63-0):

|                        |  |
|------------------------|--|
| Acute toxicity         | Oral: LD50 = 5.84 g/kg (rat)<br>Inhalation: LC50 > 1000 ppm (rat) 6 hour(s)<br>Dermal: LD50 = 16.4 ml/kg (rabbit) 24 hour(s)<br>May cause drowsiness or dizziness. |
| Irritation/Corrosivity | Irritating to eyes.  |
| Sensitization          | It is not a skin sensitizer.   |
| Repeated dose toxicity | NOAEL = 5,000 ppm (Inhalation)<br>May cause drowsiness or dizziness.   |
| Carcinogenicity        | It is unlikely to present a carcinogenic hazard to man.  |

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

**Mutagenicity** There is no evidence of mutagenic potential.

**Reproductive toxicity** Not available

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                        |  |
|------------------------|--|
| Acute toxicity         | Oral: LD50 >5 g/kg-bw<br>Dermal: LD50 >2 g/kg-bw<br>Inhalation: LC50 = 65 - 103 mg/L (Vapor), 4-hr. rat<br>May cause drowsiness or dizziness.<br>May be fatal if swallowed and enters airways. |
| Irritation/Corrosivity | Causes skin irritation. Repeated exposure may cause skin dryness or cracking. May cause eye irritation.  |
| Sensitization          | It is not a skin sensitizer.   |
| Repeated dose toxicity | NOAEC: 12350 mg/m3 (2 yr, inhal., rat, Systemic effects)<br>LOAEC: 1650 mg/m3 (2 hr, inhal., rat, CNS effects)<br>May cause drowsiness or dizziness.   |
| Carcinogenicity        | No data. It is unlikely to present a carcinogenic hazard to man.   |

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

**Mutagenicity** There is no evidence of mutagenic potential.

**Toxicity for reproduction** No information available



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

#### Isopropanol (CAS# 67-63-0):

|                                    |  |
|------------------------------------|--|
| Short term                         | LC50 (96 hour): 10,000 mg/l (Fathead minnow ( <i>Pimephales promelas</i> ))<br>LC50 24hour(s): >10,000 mg/l ( <i>Daphnia magna</i> )<br>NOEC: 3.37 µmol/l ( <i>Daphnia magna</i> ) (Growth rate) |
| Long Term                          | Not available.   |
| Persistence and degradability      | Not available.   |
| Bioaccumulative potential          | Not available.   |
| Mobility in soil                   | Not available.   |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.   |
| Other adverse effects              | None known.  |

#### Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                                    |   |
|------------------------------------|---|
| Short term                         | LL50 (96 hour): >13.4 mg/L ( <i>Oncorhynchus mykiss</i> )<br>EL50 (48 hour): 3 mg/l ( <i>Daphnia magna</i> , mobility)<br>EC50 (96 hour): 13 mg/l ( <i>Pseudokirchnerella subcapitata</i> ) |
| Long Term                          | NOELR (28 days) 1.5 mg/l ( <i>Fish</i> ) QSAR<br>LOEC (21 days): 0.32 mg/l ( <i>Daphnia magna</i> )<br>NOEL (96 hour) 6.3 mg/l ( <i>Algae</i> )   |
| Persistence and degradability      | Not available.  |
| Bioaccumulative potential          | Not available.  |
| Mobility in soil                   | Not available.  |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.  |
| Other adverse effects              | None known.   |

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

## SECTION 14: TRANSPORT INFORMATION

|   | Land transport<br>(U.S. DOT) | Sea transport<br>(IMDG) | Air transport<br>(ICAO/IATA) |
|---|------------------------------|-------------------------|------------------------------|
| UN number   | 1950                         | 1950                    | 1950                         |
| Proper Shipping Name  | Aerosols, flammable          | Aerosols, flammable     | Aerosols, flammable          |
| Transport hazard class(es)  | 2.1                          | 2.1                     | 2.1                          |
| Packing group   | None.                        | None.                   | None.                        |
| Environmental hazards   | No.                          | No.                     | No.                          |
| Special precautions for user  | None assigned                | None assigned           | None assigned                |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable |                              |                         |                              |

## SECTION 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

TSCA 12(b) Export Notification: CAS 9002-84-0 Polytetrafluoroethylene

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):



# DuPont™ Non-Stick Dry Film Lubricant with Teflon® Fluoropolymer Aerosol

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None          | ----    | ----         | ----        |

## SARA 311/312 - Hazard Categories:

☒ Fire   ☒ Sudden Release   ☐ Reactivity   ☒ Immediate (acute)   ☐ Chronic (delayed)

## SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|---------|--------------|
| Isopropanol   | 67-63-0 | 42           |

## SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None          | ----    | ----         | ----         |

## California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None          | ----    | ----             |

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: March 26, 2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

|               |   |
|---------------|---|
| Chemical Name | Not applicable.   |
| CAS No.       | Mixture   |
| Trade Name    | DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol |
| Product Code  | None  |

#### Relevant identified uses of the substance or mixture and uses advised against

|                      |           |
|----------------------|-----------|
| Identified Use(s)    | Lubricant |
| Uses Advised Against | None      |

|                        |  |
|------------------------|--|
| Company Identification | Finish Line Technologies, Inc.<br>50 Wireless Blvd.<br>Hauppauge, NY 11788 |
|------------------------|--|

|                           |  |
|---------------------------|--|
| Telephone                 | (631) 666-7300   |
| E-Mail (competent person) | <a href="mailto:SDSinfo@finishlineusa.com">SDSinfo@finishlineusa.com</a> |

#### Emergency telephone number

|                     |   |
|---------------------|---|
| Emergency Phone No. | <b>Medical Emergency:</b> PROSAR 24 hr: 1-800-217-5157 / 1-651-523-0304 |
|---------------------|---|

**Transportation Emergency:** CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Flam. Aerosol 1; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1

#### Label elements

Hazard Symbol



#### DANGER

Hazard Statement(s)

Extremely flammable aerosol.  
Pressurized container: May burst if heated.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause drowsiness or dizziness.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Do not spray on an open flame or other ignition source.  
Pressurized container: Do not pierce or burn, even after use.  
Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
Avoid breathing spray.  
Wash hands and exposed skin thoroughly after handling:  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.  
Use only outdoors or in a well-ventilated area.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

Keep out of reach of children.

Other hazards

None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s)   | % wt.   | CAS No.     |
|---|---------|-------------|
| Heptane, branched, cyclic and linear  | 15 - 25 | 426260-76-6 |
| Distillates (petroleum), hydrotreated light   | 15 - 25 | 64742-47-8  |
| Distillates (petroleum), blend of various solvent-refined and hydrotreated heavy paraffinic and residual oils | 1 - 20  | mixture     |
| Propane   | 5 - 15  | 74-98-6     |
| Butane  | 5 - 15  | 106-97-8    |

Additional Information - None

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Inhalation

Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.

Skin Contact

Wash affected skin with soap and water. If symptoms develop, obtain medical attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms occur obtain medical attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

May be fatal if swallowed and enters airways. Will cause skin irritation. Vapours may cause drowsiness and dizziness.

**Indication of any immediate medical attention and special treatment needed**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

-Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray.

-Unsuitable Extinguishing Media

Do not use water jet.



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

**Special hazards arising from the substance or mixture**

Highly flammable vapor (flash point below 23°C).

**Advice for fire-fighters**

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Take precautionary measures against static discharges. Avoid contact with skin and eyes.

**Environmental precautions**

Prevent liquid entering sewers, basements and workpits.

**Methods and material for containment and cleaning up**

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

**Reference to other sections**

None

**Additional Information**

None

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid contact with skin and eyes. Use product in a well-ventilated area only.

**Conditions for safe storage, including any incompatibilities**

-Storage temperature

Keep in a cool, well ventilated place.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidising chemicals.

**Specific end use(s)**

Lubricant

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

| SUBSTANCE.                           | CAS No.     | (8hr TWA)           |                                    | STEL       |             | Note:                    |
|--------------------------------------|-------------|---------------------|------------------------------------|------------|-------------|--------------------------|
|                                      |             | PEL (OSHA)          | TLV (ACGIH)                        | PEL (OSHA) | TLV (ACGIH) |                          |
| Heptane, branched, cyclic and linear | 426260-76-6 | 500 ppm*            | 1500 mg/m <sup>3</sup>             | -----      | -----       | *n-heptane               |
| Oil mist (mineral)                   | -----       | 5 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> <sup>(1)</sup> | -----      | -----       | <sup>(1)</sup> Inhalable |
| Propane                              | 74-98-6     | 1000 ppm            | Aspyx.#                            | -----      | -----       | #                        |

\*Assure minimum oxygen content of work atmosphere.

**Recommended monitoring method**

NIOSH 1500 (hydrocarbons, B.P. 36 - 216 °C) ; NIOSH 5026 (Oil mist; mineral)

**Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded.

**Personal protection equipment**

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).





# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber)

Respiratory protection



In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not normally required.

Environmental Exposure Controls

None known

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|  |                                |
|--|--------------------------------|
| Appearance                               | Liquid / Liquefied gas         |
| Color.                                   | Clear / Colourless             |
| Odor                                     | Petroleum spirit               |
| Odor Threshold (ppm)                     | Not available                  |
| pH (Value)                               | Not available                  |
| Melting Point (°C) / Freezing Point (°C) | Not available                  |
| Boiling point/boiling range (°C):        | 94 - 98 (201 - 208 °F)         |
| Flash Point (°C)                         | -104 (Propane)                 |
| Evaporation Rate                         | Not available                  |
| Flammability (solid, gas)                | Extremely flammable            |
| Explosive Limit Ranges                   | 2.1% - 9.5% v/v (Propane)      |
| Vapour pressure (Pascal)                 | ca. $95 \times 10^4$ (Propane) |
| Vapour Density (Air=1)                   | ca. 1.56 @ 0°C (Propane)       |
| Density (g/ml)                           | Not available                  |
| Solubility (Water)                       | Not available                  |
| Solubility (Other)                       | Not available                  |
| Partition Coefficient (n-Octanol/water)  | Not available                  |
| Auto Ignition Point (°C)                 | Not available                  |
| Decomposition Temperature (°C)           | Not available                  |
| Kinematic Viscosity (cSt)                | <10 @ 40 °C                    |
| Explosive properties                     | Not explosive.                 |
| Oxidizing properties                     | Not oxidizing.                 |

### Other information

VOC content = 59% by wt.

## SECTION 10: STABILITY AND REACTIVITY

|                                    |   |
|------------------------------------|---|
| Reactivity                         | Stable under normal conditions.                     |
| Chemical stability                 | Stable.   |
| Possibility of hazardous reactions | None anticipated.                                   |
| Conditions to avoid                | Avoid contact with heat and ignition sources.       |
| Incompatible materials             | Strong oxidising agents                             |
| Hazardous decomposition product(s) | Carbon monoxide, Carbon dioxide, Acrid smoke, Other |

## SECTION 11: TOXICOLOGICAL INFORMATION

**Exposure routes:** Inhalation, Skin Contact, Eye Contact



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## Acute toxicity

Oral: LD50 >5 g/kg-bw  
Dermal: LD50 >2 g/kg-bw  
Inhalation: LC50 = 65 - 103 mg/L (Vapor), 4-hr. rat  
May cause drowsiness or dizziness.  
May be fatal if swallowed and enters airways.

## Irritation/Corrosivity

Causes skin irritation. Repeated exposure may cause skin dryness or cracking. Causes eye irritation.

## Sensitization

It is not a skin sensitizer.

## Repeated dose toxicity

NOAEC: 12350 mg/m3 (2 yr, inhal., rat, Systemic effects)  
LOAEC: 1650 mg/m3 (2 hr, inhal., rat, CNS effects)  
May cause drowsiness or dizziness.

## Carcinogenicity

No data. It is unlikely to present a carcinogenic hazard to man.

| NTP | IARC | ACGIH | OSHA | NIOSH |
|-----|------|-------|------|-------|
| No. | No.  | No.   | No.  | No.   |

## Mutagenicity

There is no evidence of mutagenic potential.

## Toxicity for reproduction

No information available

## SECTION 12: ECOLOGICAL INFORMATION

Toxicity - Substances in preparations / mixtures

Heptane, branched, cyclic and linear (CAS# 426260-76-6) - By analogy with similar materials:

|                                    |   |
|------------------------------------|---|
| Short term                         | LL50 (96 hour): >13.4 mg/L ( <i>Oncorhynchus mykiss</i> )<br>EL50 (48 hour): 3 mg/l ( <i>Daphnia magna</i> , mobility)<br>EC50 (96 hour): 13 mg/l ( <i>Pseudokirchnerella subcapitata</i> ) |
| Long Term                          | NOELR (28 days) 1.5 mg/l ( <i>Fish</i> ) QSAR<br>LOEC (21 days): 0.32 mg/l ( <i>Daphnia magna</i> )<br>NOEL (96 hour) 6.3 mg/l ( <i>Algae</i> )   |
| Persistence and degradability      | Not available.  |
| Bioaccumulative potential          | Not available.  |
| Mobility in soil                   | Not available.  |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB.  |
| Other adverse effects              | None known.   |

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

## SECTION 14: TRANSPORT INFORMATION

|                              | Land transport<br>(U.S. DOT) | Sea transport<br>(IMDG) | Air transport<br>(ICAO/IATA) |
|------------------------------|------------------------------|-------------------------|------------------------------|
| UN number                    | 1950                         | 1950                    | 1950                         |
| Proper Shipping Name         | Aerosols, flammable          | Aerosols, flammable     | Aerosols, flammable          |
| Transport hazard class(es)   | 2.1                          | 2.1                     | 2.1                          |
| Packing group                | Not applicable               | Not applicable          | Not applicable               |
| Environmental hazards        | No.                          | No.                     | No.                          |
| Special precautions for user | None assigned                | None assigned           | None assigned                |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable



# DuPont™ Silicone Lubricant with Teflon® fluoropolymer - Aerosol

## SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None          | ----    | ----         | ----        |

SARA 311/312 - Hazard Categories:

☒ Fire   ☒ Sudden Release   ☐ Reactivity   ☒ Immediate (acute)   ☐ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|---------|--------------|
| None          | ----    | ----         |

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None          | ----    | ----         | ----         |

California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None          | ----    | ----             |

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: March 17, 2015

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

# SAFETY DATA SHEET



Techspray E-LINE BLUE SHOWER Maintenance Cleaner

## Section 1. Identification

**GHS product identifier** : Techspray E-LINE BLUE SHOWER Maintenance Cleaner  
**Product code** : 1620-10S  
**Other means of identification** : Degreasers  
**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

**Supplier's details** : Techspray  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
Tel: 678-819-1408  
Toll free: 800-858-4043  
Fax: 806-372-8750

**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300  
CANUTEC (Canadian Transportation): (613) 996-6666  
Emergency phone: (800) 858-4043  
24/

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
GASES UNDER PRESSURE Compressed gas  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%

### GHS label elements

**Hazard pictograms**



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
Causes serious eye irritation.  
Contains gas under pressure; may explode if heated.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

**Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Degreasers

| Ingredient name   | %         | CAS number |
|-------------------|-----------|------------|
| ethanol           | ≥10 - ≤25 | 64-17-5    |
| Isopropyl alcohol | ≥10 - ≤25 | 67-63-0    |
| methanol          | ≤3        | 67-56-1    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
carbonyl halides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### [Control parameters](#)

#### [Occupational exposure limits](#)

| Ingredient name   | Exposure limits   |
|-------------------|---|
| ethanol           | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 1000 ppm 15 minutes.<br><b>NIOSH REL (United States, 10/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 10 hours.<br>TWA: 1000 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.  |
| Isopropyl alcohol | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 400 ppm 15 minutes.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 10 hours.<br>TWA: 400 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.  |
| methanol          | <b>ACGIH TLV (United States, 3/2015).</b><br><b>Absorbed through skin.</b><br>STEL: 328 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 262 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 10 hours.<br>TWA: 200 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours. |

### [Appropriate engineering controls](#)

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

|  |  |
|--|--|
| <b>Environmental exposure controls</b> | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.   |
| <b>Individual protection measures</b>  |  |
| <b>Hygiene measures</b>                | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.  |
| <b>Eye/face protection</b>             | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.   |
| <b>Skin protection</b>                 |  |
| <b>Hand protection</b>                 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>                 | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.  |
| <b>Other skin protection</b>           | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b>          | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |

## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Appearance</b>                                   |  |
| <b>Physical state</b>                               | : Liquid.  |
| <b>Color</b>  | : Clear. Colorless.  |
| <b>Odor</b>   | : Characteristic.  |
| <b>Odor threshold</b>                               | : Not available.   |
| <b>pH</b>   | : Not applicable.  |
| <b>Melting point</b>                                | : Not available.   |
| <b>Boiling point</b>                                | : Not available.   |
| <b>Flash point</b>                                  | : Not available.   |
| <b>Evaporation rate</b>                             | : >1 ((TCE=1) = 1)   |
| <b>Flammability (solid, gas)</b>                    | : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 1.1%<br>Upper: 6.7%   |
| <b>Vapor pressure</b>                               | : 7.4 kPa (55.5 mm Hg) [room temperature]  |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : Not available.   |
| <b>Solubility</b>                                   | : Not available.   |

## Section 9. Physical and chemical properties

|   |                  |
|---|------------------|
| <b>Solubility in water</b>                    | : Not available. |
| <b>Partition coefficient: n-octanol/water</b> | : Not available. |
| <b>Auto-ignition temperature</b>              | : Not available. |
| <b>Decomposition temperature</b>              | : Not available. |
| <b>Viscosity</b>                              | : Not available. |
| <b>Flow time (ISO 2431)</b>                   | : Not available. |
| <b><u>Aerosol product</u></b>                 |                  |
| <b>Type of aerosol</b>                        | : Spray          |
| <b>Heat of combustion</b>                     | : 30.26 kJ/g     |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| <b>Chemical stability</b>                 | : The product is stable.   |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame).   |
| <b>Incompatible materials</b>             | : No specific data.  |
| <b>Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result                | Species | Dose                     | Exposure |
|-------------------------|-----------------------|---------|--------------------------|----------|
| ethanol                 | LC50 Inhalation Vapor | Rat     | 124700 mg/m <sup>3</sup> | 4 hours  |
| Isopropyl alcohol       | LD50 Oral             | Rat     | 7 g/kg                   | -        |
|                         | LD50 Dermal           | Rabbit  | 12800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5000 mg/kg               | -        |
| methanol                | LC50 Inhalation Gas.  | Rat     | 145000 ppm               | 1 hours  |
|                         | LC50 Inhalation Gas.  | Rat     | 64000 ppm                | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 15800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5600 mg/kg               | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                           | Observation |
|-------------------------|--------------------------|---------|-------|------------------------------------|-------------|
| ethanol                 | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams            | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 0.066666667 minutes 100 milligrams | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 100 microliters                    | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 500 milligrams                     | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 400 milligrams                     | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 milligrams             | -           |
| Isopropyl alcohol       | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100                       | -           |

## Section 11. Toxicological information

|          |                          |        |   |               |   |
|----------|--------------------------|--------|---|---------------|---|
| methanol | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          | Eyes - Severe irritant   | Rabbit | - | 10 milligrams | - |
|          |                          |        |   | 100           | - |
|          | Skin - Mild irritant     | Rabbit | - | milligrams    | - |
|          |                          |        |   | 500           | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 24 hours 100  | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 40 milligrams | - |
|          | Skin - Moderate irritant | Rabbit | - | 24 hours 20   | - |
|          |                          |        |   | milligrams    | - |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA  | IARC | NTP |
|-------------------------|-------|------|-----|
| ethanol                 | -     | 1    | -   |
| Isopropyl alcohol       | -     | 3    | -   |
| methanol                | None. | -    | -   |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

## Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 39113.6 mg/kg |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result  | Species                                    | Exposure |
|-------------------------|---|--|----------|
| ethanol                 | Acute EC50 17.921 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute EC50 2000 µg/l Fresh water                | Daphnia - Daphnia magna                    | 48 hours |
|                         | Acute LC50 25500 µg/l Marine water              | Crustaceans - Artemia franciscana - Larvae | 48 hours |
|                         | Acute LC50 42000 µg/l Fresh water               | Fish - Oncorhynchus mykiss                 | 4 days   |
|                         | Chronic NOEC 4.995 mg/l Marine water            | Algae - Ulva pertusa                       | 96 hours |
|                         | Chronic NOEC 100 µl/L Fresh water               | Daphnia - Daphnia magna - Neonate          | 21 days  |
|                         | Chronic NOEC 0.375 µl/L Fresh water             | Fish - Gambusia holbrooki - Larvae         | 12 weeks |
| Isopropyl alcohol       | Acute LC50 1400000 to 1950000 µg/l Marine water | Crustaceans - Crangon crangon              | 48 hours |
| methanol                | Acute LC50 4200 mg/l Fresh water                | Fish - Rasbora heteromorpha                | 96 hours |
|                         | Acute EC50 16.912 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute LC50 2500000 µg/l Marine water            | Crustaceans - Crangon crangon -            | 48 hours |

## Section 12. Ecological information

|  |  |  |          |
|--|--|--|----------|
|  | Acute LC50 3289 to 4395 mg/l Fresh water | Adult<br>Daphnia - Daphnia magna - Neonate | 48 hours |
|  | Acute LC50 290 mg/l Fresh water          | Fish - Danio rerio - Egg                   | 96 hours |
|  | Chronic NOEC 9.96 mg/l Marine water      | Algae - Ulva pertusa                       | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethanol                 | -0.35              | -   | low       |
| Isopropyl alcohol       | 0.05               | -   | low       |
| methanol                | -0.77              | <10 | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.





### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                       | CAS #   | Status | Reference number |
|----------------------------------|---------|--------|------------------|
| Methanol (I); Methyl alcohol (I) | 67-56-1 | Listed | U154             |

## Section 14. Transport information

|                                | DOT Classification          | TDG Classification          | Mexico Classification       | ADR/RID                | IMDG   | IATA  |
|--------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|--|---|
| <b>UN number</b>               | -                           | -                           | -                           | UN1950                 | UN1950   | ID8000  |
| <b>UN proper shipping name</b> | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Aerosols,<br>flammable | AEROSOLS IN LIMITED QUANTITIES OF CLASS 2 (heptane, 1, 1-difluoroethane) | Consumer commodity<br>ORM-D<br>ID8000 (ethanol) |
|                                |                             |                             |                             |                        |  |   |

## Section 14. Transport information

|                                   |   |   |       |  |  |  |
|-----------------------------------|---|---|-------|--|--|--|
| <b>Transport hazard class(es)</b> | ORM-D   | ORM-D   | ORM-D | 2<br><br>                                | 2.1<br> | 9<br>                 |
| <b>Packing group</b>              | -   | -   | -     | II   | II   | -  |
| <b>Environmental hazards</b>      | Yes.  | No.   | No.   | Yes.   | No.  | No.  |
| <b>Additional information</b>     | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). | -     | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><br><b><u>Hazard identification number</u></b><br>UN1950<br><br><b><u>Tunnel code</u></b><br>(D) | -  | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** heptane  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Air Act (CAA) 112 regulated flammable substances:** 1,1-difluoroethane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Sudden release of pressure  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

| Name              | %         | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------|-----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| ethanol           | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | Yes.                            |
| Isopropyl alcohol | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | No.                             |
| methanol          | ≤3        | Yes.        | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|  | Product name                  | CAS number         | %               |
|--|-------------------------------|--------------------|-----------------|
| <b>Form R - Reporting requirements</b> | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |
| <b>Supplier notification</b>           | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: HEPTANE; N-HEPTANE; DIFLUOROETHANE; ETHYL ALCOHOL; DENATURED ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHANOL; METHYL ALCOHOL
- New York** : The following components are listed: Methanol
- New Jersey** : The following components are listed: n-HEPTANE; HEPTANE; 1,1-DIFLUOROETHANE; ETHANE, 1,1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHYL ALCOHOL; METHANOL
- Pennsylvania** : The following components are listed: HEPTANE; DENATURED ALCOHOL; ETHANOL; ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS); METHANOL

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name     | Cancer     | Reproductive | No significant risk level | Maximum acceptable dosage level                              |
|---------------------|------------|--------------|---------------------------|--|
| ethanol<br>methanol | No.<br>No. | No.<br>Yes.  | Yes.<br>No.               | No.<br>23000 µg/day (ingestion)<br>47000 µg/day (inhalation) |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

|                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Europe</b>            | : All components are listed or exempted.  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS):</b> All components are listed or exempted.<br><b>Japan inventory (ISHL):</b> Not determined. |
| <b>Malaysia</b>          | : Not determined.   |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : All components are listed or exempted.  |
| <b>Turkey</b>            | : All components are listed or exempted.  |

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |
|                  |   |   |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

## Section 16. Other information

| Classification  | Justification  |
|---|--|
| FLAMMABLE AEROSOLS - Category 1<br>GASES UNDER PRESSURE - Compressed gas<br>SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 1A | On basis of test data<br>On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method |

### History

**Date of printing** : 8/15/2019

**Date of issue/Date of revision** : 8/15/2019

**Date of previous issue** : 8/15/2019

**Version** : 2

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## SAFETY DATA SHEET

### Lubricating Oil

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

##### Product identifier

**Product name** Lubricating Oil  
**Chemical name** Process Oil  
**Product number** 1003, 1003B, 1003RB, 1003CN  
**Internal identification** 1000-202  
**CAS number** 64742-54-7

##### Recommended use of the chemical and restrictions on use

**Application** Firearm Lubrication  
**Uses advised against** No specific uses advised against are identified.

##### Details of the supplier of the safety data sheet

**Manufacturer** Bushnell Holdings Inc  
9200 Cody  
Overland Park, KS 66214  
1-800-423-3537  
dangerous.goods@vistaoutdoor.com

##### Emergency telephone number

**Emergency telephone** Emergency Telephone Number (Hazardous Material/Dangerous Goods Transportation Emergency Only) 1-800-424-9300 (Inside US Only) +01-703-527-3887 (Outside US) - (CHEMTREC, Day and Night)

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

**Physical hazards** Not Classified  
**Health hazards** Not Classified  
**Environmental hazards** Not Classified

##### Label elements

**Hazard statements** NC Not Classified

##### Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

#### 3. Composition/information on ingredients

##### Substances

**Product name** Lubricating Oil  
**Chemical name** Process Oil  
**CAS number** 64742-54-7

#### 4. First-aid measures

##### Description of first aid measures

## Lubricating Oil

|                                   |  |
|-----------------------------------|--|
| <b>General information</b>        | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.   |
| <b>Inhalation</b>                 | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. |
| <b>Ingestion</b>                  | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues.  |
| <b>Skin Contact</b>               | No specific recommendations. Rinse with water. Get medical attention if any discomfort continues.  |
| <b>Eye contact</b>                | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues.  |
| <b>Protection of first aiders</b> | Use protective equipment appropriate for surrounding materials.  |

### Most important symptoms and effects, both acute and delayed

|                            |   |
|----------------------------|---|
| <b>General information</b> | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known. Spray/mists may cause respiratory tract irritation.                             |
| <b>Ingestion</b>           | No specific symptoms known. May cause discomfort if swallowed.  |
| <b>Skin contact</b>        | No specific symptoms known. May cause discomfort.   |
| <b>Eye contact</b>         | No specific symptoms known. May be slightly irritating to eyes.   |

### Indication of immediate medical attention and special treatment needed

|                             |                                |
|-----------------------------|--------------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically.         |
| <b>Specific treatments</b>  | No special treatment required. |

## 5. Fire-fighting measures

### Extinguishing media

|                                       |  |
|---------------------------------------|--|
| <b>Suitable extinguishing media</b>   | The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| <b>Unsuitable extinguishing media</b> | Do not use water jet as an extinguisher, as this will spread the fire.   |

### Special hazards arising from the substance or mixture

|                                      |   |
|--------------------------------------|---|
| <b>Specific hazards</b>              | Containers can burst violently or explode when heated, due to excessive pressure build-up.                  |
| <b>Hazardous combustion products</b> | Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

### Advice for firefighters

|  |   |
|--|---|
| <b>Protective actions during firefighting</b>        | Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. |
| <b>Special protective equipment for firefighters</b> | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.   |

## Lubricating Oil

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** No specific recommendations. For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store away from incompatible materials (see Section 10). No specific recommendations.

**Storage class** Unspecified storage.

#### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 10 mg/m<sup>3</sup>

OSHA = Occupational Safety and Health Administration.

ACGIH = American Conference of Governmental Industrial Hygienists.

#### Exposure controls

#### Protective equipment



**Appropriate engineering controls** No specific ventilation requirements.

**Eye/face protection** No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

## Lubricating Oil

|  |   |
|--|---|
| <b>Hand protection</b>                 | No specific hand protection recommended. Large Spillages: Wear protective gloves.   |
| <b>Other skin and body protection</b>  | Wear appropriate clothing to prevent repeated or prolonged skin contact.  |
| <b>Hygiene measures</b>                | Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.                                     |
| <b>Respiratory protection</b>          | No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn. |
| <b>Environmental exposure controls</b> | Not regarded as dangerous for the environment.  |

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

|   |                           |
|---|---------------------------|
| <b>Appearance</b>                                   | Clear liquid.             |
| <b>Color</b>  | Water-white.              |
| <b>Odor</b>   | Odorless.                 |
| <b>pH</b>   | Not applicable.           |
| <b>Melting point</b>                                | Not determined.           |
| <b>Initial boiling point and range</b>              | 315°C/599°F               |
| <b>Flash point</b>                                  | 192°C/378°F               |
| <b>Evaporation rate</b>                             | No information available. |
| <b>Flammability (solid, gas)</b>                    | Class IIIB Liquid         |
| <b>Upper/lower flammability or explosive limits</b> | Not available.            |
| <b>Vapor pressure</b>                               | < 0.01 mm Hg @ 25°C       |
| <b>Vapor density</b>                                | > 1.0 g/cc                |
| <b>Relative density</b>                             | 0.866                     |
| <b>Bulk density</b>                                 | 7.228 lb/gal              |
| <b>Solubility(ies)</b>                              | Insoluble in water.       |
| <b>Partition coefficient</b>                        | Not determined.           |
| <b>Auto-ignition temperature</b>                    | 210°C/410°F               |
| <b>Decomposition Temperature</b>                    | Not determined.           |
| <b>Volatility</b>                                   | 3% wt (Max)               |

### 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | See the other subsections of this section for further details.  |
| <b>Stability</b>                          | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
| <b>Possibility of hazardous reactions</b> | No potentially hazardous reactions known.   |

## Lubricating Oil

|   |   |
|---|---|
| <b>Conditions to avoid</b>              | There are no known conditions that are likely to result in a hazardous situation.   |
| <b>Materials to avoid</b>               | No specific material or group of materials is likely to react with the product to produce a hazardous situation.  |
| <b>Hazardous decomposition products</b> | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

### 11. Toxicological information

#### Information on toxicological effects

**Toxicological effects** Not regarded as a health hazard under current legislation.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

#### Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

#### Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

## Lubricating Oil

|                            |   |
|----------------------------|---|
| <b>General information</b> | No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| <b>Inhalation</b>          | No specific symptoms known. Spray/mists may cause respiratory tract irritation.   |
| <b>Ingestion</b>           | No specific symptoms known. May cause discomfort if swallowed.  |
| <b>Skin Contact</b>        | No specific symptoms known. May cause discomfort.   |
| <b>Eye contact</b>         | No specific symptoms known. May be slightly irritating to eyes.   |
| <b>Route of entry</b>      | Ingestion Inhalation Skin and/or eye contact  |
| <b>Target Organs</b>       | No specific target organs known.  |

### 12. Ecological Information

|   |   |
|---|---|
| <b>Ecotoxicity</b>                          | Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment. |
| <b>Toxicity</b>                             | Based on available data the classification criteria are not met.  |
| <b><u>Persistence and degradability</u></b> |   |
| <b>Persistence and degradability</b>        | The degradability of the product is not known.  |
| <b><u>Bioaccumulative potential</u></b>     |   |
| <b>Bio-Accumulative Potential</b>           | No data available on bioaccumulation.   |
| <b>Partition coefficient</b>                | Not determined.   |
| <b><u>Mobility in soil</u></b>              |   |
| <b>Mobility</b>                             | No data available.  |
| <b><u>Other adverse effects</u></b>         |   |
| <b>Other adverse effects</b>                | None known.   |

### 13. Disposal considerations

|                                       |  |
|---------------------------------------|--|
| <b><u>Waste treatment methods</u></b> |  |
| <b>General information</b>            | The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.  |
| <b>Disposal methods</b>               | Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority. |

### 14. Transport information

|                                       |  |
|---------------------------------------|--|
| <b>General</b>                        | The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT). |
| <b><u>UN Number</u></b>               | Not applicable.  |
| <b><u>UN proper shipping name</u></b> | Not applicable.  |

## Lubricating Oil

### Transport hazard class(es)

No transport warning sign required.

### Packing group

Not applicable.

### Environmental hazards

#### Environmentally Hazardous Substance

No.

### Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## 15. Regulatory information

### US Federal Regulations

#### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

#### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

#### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

#### SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

#### CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

#### FDA - Essential Chemical

None of the ingredients are listed or exempt.

#### FDA - Precursor Chemical

None of the ingredients are listed or exempt.

#### SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

#### OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

### US State Regulations

#### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

## Lubricating Oil

### California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

### Massachusetts "Right To Know" List

None of the ingredients are listed or exempt.

### Rhode Island "Right To Know" List

None of the ingredients are listed or exempt.

### Minnesota "Right To Know" List

None of the ingredients are listed or exempt.

### New Jersey "Right To Know" List

None of the ingredients are listed or exempt.

### Pennsylvania "Right To Know" List

None of the ingredients are listed or exempt.

### Inventories

#### US - TSCA

None of the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

### 16. Other information

**Classification abbreviations and acronyms**      Asp. Tox. = Aspiration hazard

**Training advice**      Only trained personnel should use this material.

**Revision date**      2/8/2019

**Revision**      7

**Supersedes date**      10/9/2017

**SDS No.**      4634

**End of Safety Data Sheet**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



# SLIPKOTE® Specialty Lubricants

manufactured by HUSK-ITT Corporation / SPECIALTY LUBRICANTS Corporation

## Eastern Region Office:

8300 Corporate Park Drive, Macedonia, Ohio 44056  
(330) 425-2567 • FAX (330) 425-9637  
(800) 238-5823 • www.speclubes.com

## Western Region Office:

1580 Industrial Avenue, Norco, California 92860  
(951) 340-4000 • FAX (951) 340-4011  
(800) 4-HUSKEY • www.huskey.com

Conforms to HazCom 2012/United States

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION

**PRODUCT IDENTIFIER(S)/ TRADEMARK(S)  
USED ON THE LABEL:**

SLIPKOTE Air Tool Oil 150  
Husky air tool oil – HDA10800AV  
Campbell Hausfeld (CH) air tool oil – ST127001AV, ST127012AV

**OTHER MEANS OF IDENTIFICATION:**

Product Code – 10640

**CHEMICAL FAMILY:**

Compounded Petroleum Oil

**FORMULA:**

Proprietary Information

**MANUFACTURER:**

SPECIALTY LUBRICANTS CORPORATION  
8300 Corporate Park Drive  
Macedonia, OH 44056 USA  
(P): 1-800-238-5823  
(F): 1-330-425-9637

**EMERGENCY PHONE:**

800-424-9300 (24HR)

**CHEMTREC PHONE:**

800-424-9300 (24HR)

### SECTION 2: HAZARDS IDENTIFICATION

**PHYSICAL HAZARDS:** Not classified.

**HEALTH HAZARDS:** Not classified.

**ENVIRONMENTAL HAZARDS:** Not classified.

**OSHA DEFINED HAZARDS:** Not classified.

**LABEL ELEMENTS:**

**SIGNAL WORD:** Not applicable.

**HAZARD STATEMENTS:** Not applicable.

**PREVENTION:** Not applicable.

**RESPONSE:** Not applicable.

**STORAGE:** Not applicable.

**DISPOSAL:** Not applicable.

**HAZARDS NOT OTHERWISE  
CLASSIFIED (HNOC):** See Section 11

**ADDITIONAL INFORMATION:** None.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### SUBSTANCES

| CHEMICAL NAME                             | CAS NUMBER | %    |
|---|------------|------|
| Hydrotreated Heavy Paraffinic Distillates | 64742-65-0 | > 99 |
| Zinc Dialkyldithiophosphate Additive      | 68649-42-3 | < 1  |

### SECTION 4: FIRST AID MEASURES

#### DESCRIPTION OF NECESSARY FIRST AID MEASURES

**EYE CONTACT:** Flush eyes with large amounts of water for 15 minutes. If eye irritation develops or persists get medical help.

**SKIN CONTACT:** Remove contaminated clothing. Wash affected area with a waterless hand cleaner, and/or soap and water. If irritation persists, consult a physician.

**INHALATION:** Remove to fresh air. Get medical attention if symptoms persist.

**ASPIRATION:** If there is any suspicion of aspiration into the lungs obtain medical advice.

**INGESTION:** If the material is swallowed, get immediate medical attention—Do not induce vomiting.

**NOTES TO PHYSICIAN:** This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

### SECTION 5: FIRE-FIGHTING MEASURES

**FLASH POINT:** > 420 °F

**FLASH POINT METHOD:** COC

**BURING RATE:** Not determined.

**LOWER FLAMMABLE LIMIT (LFL):** Not determined.

**UPPER FLAMMABLE LIMIT (UFL):** Not determined.

**FLAMMABILITY CLASSIFICATION:** Not determined.

**EXTINGUISHING MEDIA:** Dry chemical, foam, carbon dioxide, water fog. Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.

**GENERAL FIRE HAZARDS:** Fire and explosion hazards are moderate when this product is exposed to heat or flame

**HAZARDOUS COMBUSTION PROCEDURES:** Carbon monoxide and carbon dioxide. Decomposition of this product may yield oxides of sulfur and nitrogen. Decomposition of this product may yield oxides of phosphorus.

**FIRE-FIGHTING EQUIPMENT/INSTRUCTION:** Do not point solid water stream directly into burning oil to avoid spreading. Wear full set of protective equipment including chemical goggles and gloves.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**CONTAINMENT PROCEDURES:** Contain the discharge material. Eliminate all sources of ignition or flammables that may come into contact with a spill of this material.

**CLEAN-UP PROCEDURES:** Absorb with inert absorbent such as dry clay, sand, or diatomaceous earth. Scoop up used absorbent into drums. Dispose of spent absorbent in an approved industrial waste landfill. Do not allow the spilled product to enter public drainage system or open water courses. Thoroughly wash the area after a spill or leak clean-up.

**EVACUATION PROCEDURES:** Isolate area. Keep unnecessary personnel away.

## SECTION 6: ACCIDENTAL RELEASE MEASURES (CONTINUED)

**SPECIAL INSTRUCTIONS:** Wear appropriate protective equipment and clothing during clean-up. Surfaces may become slippery after spillage.

**SPILL TO NAVIGABLE WATERS:** If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the Nation Response Center.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR HANDLING:** Avoid getting this material into contact with your skin and eyes. Avoid the generation of oil mists. Wash hands after handling and before eating. Keep this product from heat, sparks, or flames.

**RECOMMENDED STORAGE METHODS:** Keep the container tightly closed and in a cool, well-ventilated place. When using this material, do not eat, drink or smoke. Do not store this material in open or unlabeled containers. Store away from strong oxidizers.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMITS

#### U.S. OSHA TABLE Z-1 LIMITS FOR AIR CONTAMINANTS (29 CFR 1910.1000)

| COMPONENTS                                | TYPE | VALUE               | FORM  |
|---|------|---------------------|-------|
| Distillates (Petroleum)<br>CAS 64742-65-0 | PEL  | 5 mg/m <sup>3</sup> | Mist. |

#### U.S. ACGIH THRESHOLD LIMIT VALUES

| MATERIAL | TYPE | VALUE               | FORM  |
|----------|------|---------------------|-------|
| Base Oil | TWA  | 5 mg/m <sup>3</sup> | Mist. |

#### U.S. NIOSH

##### (POCKET GUIDE TO CHEMICAL HAZARDS):

| MATERIAL                                  | TYPE | VALUE                | FORM  |
|---|------|----------------------|-------|
| Base Oil                                  | STEL | 10 mg/m <sup>3</sup> | Mist. |
|   | TWA  | 5 mg/m <sup>3</sup>  | Mist. |
| COMPONENTS                                | TYPE | VALUE                | FORM  |
| Distillates (Petroleum)<br>CAS 64742-65-0 | STEL | 10 mg/m <sup>3</sup> | Mist. |
|   | TWA  | 5 mg/m <sup>3</sup>  | Mist. |

**BIOLOGICAL LIMIT VALUES:** No biological limits noted for the ingredient(s).

**ENGINEERING CONTROLS:** Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

**EYE/FACE PROTECTION:** Wear chemical goggles or a full face shield.

**SKIN PROTECTION** Use impervious gloves for prolonged contact. Wear oil-impervious garments if contact is unavoidable. The use of neoprene gloves is recommended.

**RESPIRATORY PROTECTION:** If workplace exposure limit is exceeded use NIOSH-approved disposable dust/mist mask breathing apparatus for entry into confined space in the absence of proper environmental control.

**GENERAL:** Use good hygiene when handling petroleum product.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Clear & Bright.

PHYSICAL STATE: Liquid.  
COLOR: Light Amber to Amber.  
FORM: Liquid.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

ODOR: Hydrocarbon-like.  
ODOR THRESHOLD: Not available.  
pH: Not applicable.  
VISCOSITY AT 100 °F, SUS: 158  
GRAVITY, °API: 32.6  
SOLUBILITY IN WATER: No  
FLASH POINT °F: 420 °F  
BOILING POINT °F: NA  
POUR POINT °F: -15  
VAPOR PRESSURE (MM HG 20C): NA  
EVAPORATION RATE: Not available.  
VAPOR DENSITY: Not available.  
RELATIVE DENSITY: 0.86  
RELATIVE DENSITY TEMPERATURE: 60° F (15.56° C)  
ASTM D-4052/ISO 12185  
FLAMMABILITY (SOLID,GAS): Not available.  
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS  
FLAMMABILITY LIMIT-LOWER (%): Not available.  
FLAMMABILITY LIMIT-UPPER (%): Not available.  
EXPLOSIVE LIMIT-LOWER (%): Not available.  
EXPLOSIVE LIMIT-UPPER (%): Not available.  
PARTITION COEFFICIENT (N-OCTANOL/WATER): Not established.  
AUTO-IGNITION TEMPERATURE: > 600 °F (> 315.56 °C) ASTM E-659  
DECOMPOSITION TEMPERATURE: Not available.

## SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.  
HAZARDOUS POLYMERIZATION: Hazard polymerization will not occur.  
CHEMICAL INCOMPATIBILITIES: This product may react with strong oxidizing agents.  
CONDITIONS TO AVOID (STABILITY): High temperatures and open flames.  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, Carbon monoxide, Oxides of sulfur and nitrogen.

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY/ TARGET ORGAN INFORMATION:

GENERAL PRODUCT/  
COMPONENT INFORMATION: Product may be irritating to the skin, eyes, and respiratory system. Repeated skin contact with this product may cause dermatitis or an oil acne. Excessive inhalation of oil mist may cause accumulation of mineral oil in the lungs accompanied by pulmonary fibrosis.

COMPONENT LD50/LC50: No data available for product.

EPIDEMIOLOGY: No data available for product.

### CARCINOGENICITY:

GENERAL PRODUCT/  
COMPONENT INFORMATION: No data available on the product as a whole. Prolonged and repeated skin contact with some mildly treated or untreated mineral oils have produced skin cancer in laboratory animals. Note

that USED oils tend to contain higher amounts of the cancer-causing aromatics, which have been linked to scrotal and lung cancer in humans.

## SECTION 11: TOXICOLOGICAL INFORMATION (CONTINUED)

|  |   |
|--|---|
| <b>COMPONENT CARCINOGENICITY LISTING:</b>    | None of this product's components are listed by ACGIH, IARC, NIOSH, NTP or OSHA.  |
| <b>TERATOGENICITY/ REPRODUCTIVE EFFECTS:</b> | No data available for the product as a whole.   |
| <b>NEUROTOXICITY:</b>                        | High vapor/aerosol concentrations (attainable only at elevated temperatures) may cause central nervous system effects such as dizziness, drowsiness or headaches. |
| <b>MUTAGENICITY:</b>                         | No data available on this product as a whole.   |
| <b>OTHER INFORMATION:</b>                    | No information available.   |

## SECTION 12: ECOLOGICAL INFORMATION

|                            |   |
|----------------------------|---|
| <b>ECOTOXICITY:</b>        | No information is available on ecotoxicity of this product. Keep product out of sewers and waterways. |
| <b>ENVIRONMENTAL FATE:</b> | No information is available.  |

## SECTION 13: DISPOSAL CONSIDERATIONS

### U.S. EPA WASTE NUMBER & DESCRIPTIONS

|                                     |  |
|-------------------------------------|--|
| <b>GENERAL PRODUCT INFORMATION:</b> | Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. All waste must be handled in accordance with local, state, and federal governments. |
| <b>COMPONENT WASTE NUMBERS:</b>     | No EPA Waste Numbers are applicable for this product's components  |
| <b>DISPOSAL INSTRUCTIONS:</b>       | Dispose of waste material according to Local, State, Federal, and Provincial Environment Regulation.   |

## SECTION 14: TRANSPORT INFORMATION

|  |                                      |
|--|--------------------------------------|
| <b>PROPER SHIPPING NAME:</b>                     | Not regulated as hazardous material. |
| <b>HAZARD CLASS:</b>                             | Not regulated.                       |
| <b>DOT ID NO.:</b>                               | Not regulated.                       |
| <b>PACKING GROUP:</b>                            | Not regulated.                       |
| <b>DOT SHIPPING LABEL:</b>                       | None required.                       |
| <b>ADDITIONAL SHIPPING INFORMATION:</b>          | Not regulated.                       |
| <b>INTERNATIONAL TRANSPORTATION REGULATIONS:</b> | Not regulated as dangerous goods.    |

## SECTION 15: REGULATORY INFORMATION

|  |  |
|--|--|
| <b><u>U.S. FEDERAL REGULATIONS:</u></b>  | This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List. |
| <b>CERCLA/SARA HAZARDOUS SUBSTANCES:</b> | Not applicable.  |

TSCA 12(b) EXPORT NOTIFICATION (40 CFR 707, SUBPT. D): Not regulated.  
 CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4): Not listed.  
 U.S. OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050): Not listed.

## SECTION 15: REGULATORY INFORMATION (CONTINUED)

### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986

(SARA) HAZARD CATEGORIES: Immediate Hazard Yes  
 – No  
 Delayed Hazard – No  
 Fire Hazard – No  
 Pressure Hazard – No  
 Reactivity Hazard –  
 SARA 302 EXTREMELY HAZARDOUS SUBSTANCE: Not listed.  
 SARA 311-312 HAZARDOUS CHEMICAL: Yes.  
 SARA 313 (TRI REPORTING): Not regulated.

### OTHER FEDERAL REGULATIONS

CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPs) LIST: Not regulated.  
 CLEAN AIR ACT (CAA) SECTION 112(R) ACCIDENTAL RELEASE PREVENTION (40 CFR 68.130): Not regulated.  
 SAFE DRINKING WATER ACT (SDWA): Not regulated.

U.S. STATE REGULATIONS: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

U.S. MASSACHUSETTS RTK – SUBSTANCE LIST: Not regulated.  
 U.S. NEW JERSEY WORKER AND COMMUNITY RIGHT-TO-KNOW ACT: Not regulated.  
 U.S. PENNSYLVANIA RTK – HAZARDOUS SUBSTANCES: Not regulated.  
 U.S. RHODE ISLAND RTK: Not regulated.  
 U.S. CALIFORNIA PROPOSITION 65: Not listed.

### INTERNATIONAL INVENTORIES:

| COUNTRY(S) OR REGION          | INVENTORY NAME   | ON INVENTORY (YES/NO)* |
|-------------------------------|--|------------------------|
| Australia                     | Australian Inventory of Chemical Substances (AICS)   | Yes                    |
| Canada                        | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDSL)  | Yes<br>No              |
| China                         | Inventory of Existing Chemical Substances in China   | Yes                    |
| Europe                        | European Inventory of Existing Commercial Chemical Substances<br>European List of Notified Chemical Substances | Yes<br>No              |
| Japan                         | Inventory of Existing and New Chemical Substances  | Yes                    |
| Korea                         | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                   | New Zealand Inventory  | Yes                    |
| Philippines                   | Philippine Inventory of Chemicals and Chemical Substances  | Yes                    |
| United States and Puerto Rico | Toxic Substances Control Act (TSCA) Inventory  | Yes                    |

\* **"Yes"** indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

**"No"** indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## SECTION 16: OTHER INFORMATION

### HAZARDOUS MATERIAL INFORMATION SYSTEM (U.S.A.)

Health: 1

Flammability: 1

Reactivity: 0

### NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)

Health: 0

Flammability: 1

Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE-Personal Protection Equipment Index recommendation, \*- Chronic Effect Indication). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

### HISTORY

DATE ISSUE (MM/DD/YYYY): 03/04/2015

### **KEY TO ABBREVIATIONS:**

ATE = Acute Toxicity Estimate  
BCF = Bio-concentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Code  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### **NOTICE TO THE READER:**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Liquid Wrench Silicone Spray - WERCS

### Other means of identification

**SDS number** M914 - WERCS  
**Part No.** M914, M914/6, M914/4  
**Tariff code** 3403.19.1000

**Recommended use** Lubricant


**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** RSC Chemical Solutions  
**Address** 600 Radiator Road  
Indian Trail, NC 28079  
United States  
**Telephone** Customer Service: (704) 821-7643  
Technical: (704) 684-1811  
**Website** www.rscbrands.com  
**E-mail** sds@rscbrands.com  
**Emergency phone number** Emergency Telephone: (303) 623-5716  
Emergency Contact: RMPDC (877) 740-5015

## 2. Hazard(s) identification

|                              |   |                             |
|------------------------------|---|-----------------------------|
| <b>Physical hazards</b>      | Flammable aerosols  | Category 2                  |
|                              | Gases under pressure  | Compressed gas              |
| <b>Health hazards</b>        | Skin corrosion/irritation   | Category 2                  |
|                              | Serious eye damage/eye irritation   | Category 2A                 |
|                              | Specific target organ toxicity, single exposure                                     | Category 3 narcotic effects |
|                              | Aspiration hazard   | Category 1                  |
| <b>Environmental hazards</b> | Not classified.   |                             |
| <b>OSHA defined hazards</b>  | Not classified.   |                             |
| <b>Label elements</b>        |  |                             |

**Signal word** Danger

**Hazard statement** Flammable aerosol. Contains gas under pressure; may explode if heated. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

### Precautionary statement

#### Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves.

#### Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

|  |  |
|--|--|
| <b>Storage</b>                                   | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.   |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | Combustible. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.   |
| <b>Supplemental information</b>                  | 79.43% of the mixture consists of component(s) of unknown acute oral toxicity. 83.17% of the mixture consists of component(s) of unknown acute dermal toxicity. 51.73% of the mixture consists of component(s) of unknown acute inhalation toxicity. 38.33% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 19.36% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name  | Common name and synonyms | CAS number | %         |
|--|--------------------------|------------|-----------|
| Distillates (petroleum), Hydrotreated Light            |                          | 64742-47-8 | 10 - < 20 |
| Naphtha (petroleum), Hydrotreated Heavy                |                          | 64742-48-9 | 10 - < 20 |
| Solvent Naphtha (petroleum), Medium Aliph.             |                          | 64742-88-7 | 10 - < 20 |
| Stoddard Solvent                                       |                          | 8052-41-3  | 10 - < 20 |
| Dimethylpolysiloxane                                   |                          | 63148-62-9 | 5 - < 10  |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic |                          | 64742-52-5 | 5 - < 10  |
| 1,2,4-Trimethylbenzene                                 |                          | 95-63-6    | 1 - < 3   |
| BENZENE, DIMETHYL                                      |                          | 1330-20-7  | 1 - < 3   |
| BENZENE, METHYL-                                       |                          | 108-88-3   | 1 - < 3   |
| BENZENE,1-METHYLETHYL-                                 |                          | 98-82-8    | 1 - < 3   |
| Carbon Dioxide   |                          | 124-38-9   | 1 - < 3   |
| Corrosion Inhibitor                                    |                          | Mixture    | 1 - < 3   |
| ETHYLBENZENE   |                          | 100-41-4   | 1 - < 3   |
| HEXANE   |                          | 110-54-3   | 1 - < 3   |
| Nonane   |                          | 111-84-2   | 1 - < 3   |
| Trimethylbenzene                                       |                          | 25551-13-7 | 1 - < 3   |
| BENZENE  |                          | 71-43-2    | < 0.3     |
| NAPHTHALENE  |                          | 91-20-3    | < 0.3     |
| Other components below reportable levels               |                          |            | 1 - < 3   |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>  | Not likely, due to the form of the product. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

## 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.  |
| <b>General fire hazards</b>  | Flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame. Combustible.   |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will spread on the water surface. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  |
| <b>Environmental precautions</b>   | Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.<br>Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.  |

## 7. Handling and storage

### Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect containers from physical damage; do not drag, roll, slide, or drop. When moving containers, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport containers. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Components            | Type | Value |
|-----------------------|------|-------|
| BENZENE (CAS 71-43-2) | STEL | 5 ppm |
|                       | TWA  | 1 ppm |

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components  | Type | Value      | Form  |
|---|------|------------|-------|
| BENZENE, DIMETHYL (CAS 1330-20-7)                                       | PEL  | 435 mg/m3  |       |
| BENZENE, 1-METHYLETHYL- (CAS 98-82-8)                                   | PEL  | 100 ppm    |       |
|   |      | 245 mg/m3  |       |
| Carbon Dioxide (CAS 124-38-9)   | PEL  | 50 ppm     |       |
|   |      | 9000 mg/m3 |       |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | PEL  | 5000 ppm   | Mist. |
|   |      | 5 mg/m3    |       |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8)            | PEL  | 2000 mg/m3 |       |
|   |      | 500 ppm    |       |
|   |      | 400 mg/m3  |       |

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components   | Type | Value                 | Form |
|--|------|-----------------------|------|
| ETHYLBENZENE (CAS 100-41-4)                              | PEL  | 100 ppm<br>435 mg/m3  |      |
| HEXANE (CAS 110-54-3)                                    | PEL  | 100 ppm<br>1800 mg/m3 |      |
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9) | PEL  | 500 ppm<br>400 mg/m3  |      |
| NAPHTHALENE (CAS 91-20-3)                                | PEL  | 100 ppm<br>50 mg/m3   |      |
| Stoddard Solvent (CAS 8052-41-3)                         | PEL  | 10 ppm<br>2900 mg/m3  |      |
|  |      | 500 ppm               |      |

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

| Components                      | Type    | Value   |
|---------------------------------|---------|---------|
| BENZENE (CAS 71-43-2)           | Ceiling | 25 ppm  |
|                                 | TWA     | 10 ppm  |
| BENZENE, METHYL- (CAS 108-88-3) | Ceiling | 300 ppm |
|                                 | TWA     | 200 ppm |

**US. ACGIH Threshold Limit Values**

| Components  | Type | Value     | Form                |
|---|------|-----------|---------------------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)                                    | TWA  | 25 ppm    |                     |
| BENZENE (CAS 71-43-2)   | STEL | 2.5 ppm   |                     |
|   | TWA  | 0.5 ppm   |                     |
| BENZENE, DIMETHYL (CAS 1330-20-7)                                       | STEL | 150 ppm   |                     |
|   | TWA  | 100 ppm   |                     |
| BENZENE, METHYL- (CAS 108-88-3)   | TWA  | 20 ppm    |                     |
| BENZENE, 1-METHYLETHYL- (CAS 98-82-8)                                   | TWA  | 50 ppm    |                     |
| Carbon Dioxide (CAS 124-38-9)   | STEL | 30000 ppm |                     |
|   | TWA  | 5000 ppm  |                     |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | TWA  | 5 mg/m3   | Inhalable fraction. |
| ETHYLBENZENE (CAS 100-41-4)   | TWA  | 20 ppm    |                     |
| HEXANE (CAS 110-54-3)   | TWA  | 50 ppm    |                     |
| NAPHTHALENE (CAS 91-20-3)   | TWA  | 10 ppm    |                     |
| Nonane (CAS 111-84-2)   | TWA  | 200 ppm   |                     |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)             | TWA  | 200 mg/m3 | Non-aerosol.        |
| Stoddard Solvent (CAS 8052-41-3)  | TWA  | 100 ppm   |                     |
| Trimethylbenzene (CAS 25551-13-7)                                       | TWA  | 25 ppm    |                     |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                           | Type | Value     | Form |
|--------------------------------------|------|-----------|------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6) | TWA  | 125 mg/m3 |      |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components  | Type    | Value       | Form  |
|---|---------|-------------|-------|
| BENZENE (CAS 71-43-2)   | STEL    | 25 ppm      | Mist. |
|   | TWA     | 1 ppm       |       |
|   | STEL    | 0.1 ppm     |       |
| BENZENE, METHYL- (CAS 108-88-3)   | STEL    | 560 mg/m3   |       |
|   | TWA     | 150 ppm     |       |
|   | STEL    | 375 mg/m3   |       |
| BENZENE, 1-METHYLETHYL- (CAS 98-82-8)                                   | TWA     | 100 ppm     |       |
|   | STEL    | 245 mg/m3   |       |
|   | STEL    | 50 ppm      |       |
| Carbon Dioxide (CAS 124-38-9)   | STEL    | 54000 mg/m3 |       |
|   | TWA     | 30000 ppm   |       |
|   | STEL    | 9000 mg/m3  |       |
| Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5) | Ceiling | 5000 ppm    |       |
|   | STEL    | 1800 mg/m3  |       |
|   | STEL    | 10 mg/m3    |       |
| ETHYLBENZENE (CAS 100-41-4)   | STEL    | 545 mg/m3   |       |
|   | TWA     | 125 ppm     |       |
|   | STEL    | 435 mg/m3   |       |
| HEXANE (CAS 110-54-3)   | TWA     | 100 ppm     |       |
|   | STEL    | 180 mg/m3   |       |
|   | STEL    | 50 ppm      |       |
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)                | TWA     | 400 mg/m3   |       |
|   | STEL    | 100 ppm     |       |
|   | STEL    | 75 mg/m3    |       |
| NAPHTHALENE (CAS 91-20-3)   | TWA     | 15 ppm      |       |
|   | STEL    | 50 mg/m3    |       |
|   | STEL    | 10 ppm      |       |
| Nonane (CAS 111-84-2)   | TWA     | 1050 mg/m3  |       |
|   | STEL    | 200 ppm     |       |
|   | STEL    | 100 mg/m3   |       |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)             | TWA     | 100 mg/m3   |       |
|   | Ceiling | 1800 mg/m3  |       |
|   | TWA     | 350 mg/m3   |       |
| Stoddard Solvent (CAS 8052-41-3)  | Ceiling | 1800 mg/m3  |       |
|   | TWA     | 350 mg/m3   |       |
|   | STEL    | 100 mg/m3   |       |

**Biological limit values**
**ACGIH Biological Exposure Indices**

| Components                        | Value     | Determinant                                   | Specimen            | Sampling Time |
|-----------------------------------|-----------|---|---------------------|---------------|
| BENZENE (CAS 71-43-2)             | 25 µg/g   | S-Phenylmercapturic acid                      | Creatinine in urine | *             |
| BENZENE, DIMETHYL (CAS 1330-20-7) | 1.5 g/g   | Methylhippuric acids                          | Creatinine in urine | *             |
| BENZENE, METHYL- (CAS 108-88-3)   | 0.3 mg/g  | o-Cresol, with hydrolysis                     | Creatinine in urine | *             |
|                                   | 0.03 mg/l | Toluene                                       | Urine               | *             |
|                                   | 0.02 mg/l | Toluene                                       | Blood               | *             |
| ETHYLBENZENE (CAS 100-41-4)       | 0.15 g/g  | Sum of mandelic acid and phenylglyoxylic acid | Creatinine in urine | *             |

**ACGIH Biological Exposure Indices**

| Components            | Value    | Determinant                         | Specimen | Sampling Time |
|-----------------------|----------|-------------------------------------|----------|---------------|
| HEXANE (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedione, without hydrolysis | Urine    | *             |

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE (CAS 71-43-2)                | Can be absorbed through the skin. |
| BENZENE, METHYL- (CAS 108-88-3)      | Can be absorbed through the skin. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
| HEXANE (CAS 110-54-3)                | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3)            | Can be absorbed through the skin. |

**US - Minnesota Haz Subs: Skin designation applies**

|                                      |                           |
|--------------------------------------|---------------------------|
| BENZENE, METHYL- (CAS 108-88-3)      | Skin designation applies. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Skin designation applies. |

**US - Tennessee OELs: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**US ACGIH Threshold Limit Values: Skin designation**

|   |                                   |
|---|-----------------------------------|
| BENZENE (CAS 71-43-2)                                       | Can be absorbed through the skin. |
| HEXANE (CAS 110-54-3)                                       | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3)                                   | Can be absorbed through the skin. |
| Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7) | Can be absorbed through the skin. |

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | Can be absorbed through the skin. |
|--------------------------------------|-----------------------------------|

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Not available.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece. Chemical respirator with organic vapor cartridge and full facepiece if threshold limits are exceeded.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

|  |                             |
|--|-----------------------------|
| <b>Appearance</b>                              | Clear. Liquid               |
| <b>Physical state</b>                          | Liquid.                     |
| <b>Form</b>                                    | Aerosol. Compressed gas.    |
| <b>Color</b>                                   | Pale yellow                 |
| <b>Odor</b>                                    | Petroleum                   |
| <b>Odor threshold</b>                          | Not available.              |
| <b>pH</b>                                      | Not available.              |
| <b>Melting point/freezing point</b>            | -94 °F (-70 °C) estimated   |
| <b>Initial boiling point and boiling range</b> | 314.6 °F (157 °C) estimated |

|   |                              |
|---|------------------------------|
| <b>Flash point</b>                                  | 117.0 °F (47.2 °C)           |
| <b>Evaporation rate</b>                             | Not available.               |
| <b>Flammability (solid, gas)</b>                    | Not applicable.              |
| <b>Upper/lower flammability or explosive limits</b> |                              |
| <b>Flammability limit - lower (%)</b>               | 0.7 % estimated              |
| <b>Flammability limit - upper (%)</b>               | 6 % estimated                |
| <b>Explosive limit - lower (%)</b>                  | Not available.               |
| <b>Explosive limit - upper (%)</b>                  | Not available.               |
| <b>Vapor pressure</b>                               | 0.26 hPa estimated           |
| <b>Vapor density</b>                                | Not available.               |
| <b>Relative density</b>                             | Not available.               |
| <b>Solubility(ies)</b>                              |                              |
| <b>Solubility (water)</b>                           | Insoluble                    |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.               |
| <b>Auto-ignition temperature</b>                    | 229 °F (109.44 °C) estimated |
| <b>Decomposition temperature</b>                    | Not available.               |
| <b>Viscosity</b>                                    | Not available.               |
| <b>Other information</b>                            |                              |
| <b>Density</b>                                      | 6.80 lbs/gal                 |
| <b>Explosive properties</b>                         | Not explosive.               |
| <b>Flame extension</b>                              | 25 in                        |
| <b>Flammability (flash back)</b>                    | No                           |
| <b>Flammability class</b>                           | Flammable IC estimated       |
| <b>Heat of combustion (NFPA 30B)</b>                | 32.78 kJ/g estimated         |
| <b>Moisture</b>                                     | < 0.03 %                     |
| <b>Oxidizing properties</b>                         | Not oxidizing.               |
| <b>Percent volatile</b>                             | 5.23 % estimated             |
| <b>Refractive index</b>                             | 1.44                         |
| <b>Specific gravity</b>                             | 0.82                         |
| <b>VOC</b>  | 58.5 % w/w                   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.      |
| <b>Incompatible materials</b>             | Strong acids. Strong oxidizing agents. Halogens.  |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.                   |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |

**Symptoms related to the physical, chemical and toxicological characteristics**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects****Acute toxicity**

May be fatal if swallowed and enters airways.

| Components                            | Species | Test Results      |
|---------------------------------------|---------|-------------------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)  |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| LD50                                  | Rabbit  | > 3160 mg/kg      |
| BENZENE, DIMETHYL (CAS 1330-20-7)     |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 3523 - 8600 mg/kg |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8)  |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 1400 mg/kg        |
| Dimethylpolysiloxane (CAS 63148-62-9) |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| <i>Liquid</i>                         |         |                   |
| LD50                                  | Rabbit  | > 2000 mg/kg      |
| ETHYLBENZENE (CAS 100-41-4)           |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 3500 mg/kg        |
| NAPHTHALENE (CAS 91-20-3)             |         |                   |
| <b><u>Acute</u></b>                   |         |                   |
| <b>Dermal</b>                         |         |                   |
| LD50                                  | Rabbit  | > 2 g/kg          |
| <b>Oral</b>                           |         |                   |
| LD50                                  | Rat     | 490 mg/kg         |

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Respiratory or skin sensitization****Respiratory sensitization**

Not a respiratory sensitizer.

**Skin sensitization**

This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

Risk of cancer cannot be excluded with prolonged exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

|                                      |   |
|--------------------------------------|---|
| BENZENE (CAS 71-43-2)                | 1 Carcinogenic to humans.                           |
| BENZENE, DIMETHYL (CAS 1330-20-7)    | 3 Not classifiable as to carcinogenicity to humans. |
| BENZENE, METHYL- (CAS 108-88-3)      | 3 Not classifiable as to carcinogenicity to humans. |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8) | 2B Possibly carcinogenic to humans.                 |
| ETHYLBENZENE (CAS 100-41-4)          | 2B Possibly carcinogenic to humans.                 |
| NAPHTHALENE (CAS 91-20-3)            | 2B Possibly carcinogenic to humans.                 |
| Stoddard Solvent (CAS 8052-41-3)     | 3 Not classifiable as to carcinogenicity to humans. |

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

|                       |        |
|-----------------------|--------|
| BENZENE (CAS 71-43-2) | Cancer |
|-----------------------|--------|

## US. National Toxicology Program (NTP) Report on Carcinogens

BENZENE (CAS 71-43-2)

Known To Be Human Carcinogen.

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Reasonably Anticipated to be a Human Carcinogen.

NAPHTHALENE (CAS 91-20-3)

Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components   | Species | Test Results  |
|--|---------|---|
| 1,2,4-Trimethylbenzene (CAS 95-63-6)                         |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 7.19 - 8.28 mg/l, 96 hours               |
| BENZENE (CAS 71-43-2)  |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 8.76 - 15.6 mg/l, 48 hours                         |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 7.2 - 11.7 mg/l, 96 hours |
| BENZENE, DIMETHYL (CAS 1330-20-7)                            |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Bluegill (Lepomis macrochirus) 7.711 - 9.591 mg/l, 96 hours                   |
| BENZENE, METHYL- (CAS 108-88-3)                              |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours                         |
| Fish   | LC50    | Coho salmon,silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours          |
| BENZENE,1-METHYLETHYL- (CAS 98-82-8)                         |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Brine shrimp (Artemia sp.) 3.55 - 11.29 mg/l, 48 hours                        |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.7 mg/l, 96 hours        |
| Dimethylpolysiloxane (CAS 63148-62-9)                        |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Channel catfish (Ictalurus punctatus) 2.36 - 4.15 mg/l, 96 hours              |
| Distillates (petroleum), Hydrotreated Light (CAS 64742-47-8) |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours                           |
| Fish   | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours        |
| ETHYLBENZENE (CAS 100-41-4)                                  |         |   |
| <b>Aquatic</b>   |         |   |
| Crustacea  | EC50    | Water flea (Daphnia magna) 1.37 - 4.4 mg/l, 48 hours                          |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 7.5 - 11 mg/l, 96 hours                  |
| HEXANE (CAS 110-54-3)  |         |   |
| <b>Aquatic</b>   |         |   |
| Fish   | LC50    | Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours             |

| Components   |      | Species   | Test Results               |
|--|------|---|----------------------------|
| Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9) |      |   |                            |
| Aquatic  |      |   |                            |
| Crustacea  | EC50 | Water flea (Daphnia pulex)                          | 2.7 - 5.1 mg/l, 48 hours   |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours         |
|  |      |   | 8.8 mg/l, 96 hours         |
| NAPHTHALENE (CAS 91-20-3)                                |      |   |                            |
| Aquatic  |      |   |                            |
| Crustacea  | EC50 | Water flea (Daphnia magna)                          | 1.09 - 3.4 mg/l, 48 hours  |
| Fish   | LC50 | Pink salmon (Oncorhynchus gorbuscha)                | 1.11 - 1.68 mg/l, 96 hours |

\* Estimates for product may be based on additional component data not shown.

## Persistence and degradability

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

|                        |             |
|------------------------|-------------|
| BENZENE                | 2.13        |
| BENZENE, DIMETHYL      | 3.12 - 3.2  |
| BENZENE, METHYL-       | 2.73        |
| BENZENE,1-METHYLETHYL- | 3.66        |
| ETHYLBENZENE           | 3.15        |
| HEXANE                 | 3.9         |
| NAPHTHALENE            | 3.3         |
| Nonane                 | 5.46        |
| Stoddard Solvent       | 3.16 - 7.15 |

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

## 13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.              |

## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, Flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not available.  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | 8, 146, 335, IB3, T4, TP1, TP29   |
| <b>Packaging exceptions</b>         | 155   |
| <b>Packaging non bulk</b>           | 203   |
| <b>Packaging bulk</b>               | 241   |

### IATA

|                                |                    |
|--------------------------------|--------------------|
| <b>UN number</b>               | UN1950             |
| <b>UN proper shipping name</b> | Aerosol, flammable |

**Transport hazard class(es)****Class** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards** Yes**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IMDG****UN number** UN1950**UN proper shipping name** Aerosols**Transport hazard class(es)****Class** 2.1**Subsidiary risk** -**Packing group** Not available.**Environmental hazards****Marine pollutant** No**EmS** F-D, S-U**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to** Not established.**Annex II of MARPOL 73/78 and  
the IBC Code****DOT****IATA; IMDG****Marine pollutant****General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Nonane (CAS 111-84-2)

1.0 % One-Time Export Notification only.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE (CAS 71-43-2)

Listed.

BENZENE, DIMETHYL (CAS 1330-20-7)

Listed.

BENZENE, METHYL- (CAS 108-88-3)

Listed.

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Listed.

ETHYLBENZENE (CAS 100-41-4)

Listed.

HEXANE (CAS 110-54-3)

Listed.

NAPHTHALENE (CAS 91-20-3)

Listed.

Nonane (CAS 111-84-2)

Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

BENZENE (CAS 71-43-2)

Cancer

Central nervous system

Blood

Aspiration

Skin

Eye

respiratory tract irritation

Flammability

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### Hazard categories

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - Yes

Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

#### SARA 313 (TRI reporting)

| Chemical name          | CAS number | % by wt. |
|------------------------|------------|----------|
| 1,2,4-Trimethylbenzene | 95-63-6    | 1 - < 3  |
| BENZENE                | 71-43-2    | < 0.3    |
| BENZENE, DIMETHYL      | 1330-20-7  | 1 - < 3  |
| BENZENE, METHYL-       | 108-88-3   | 1 - < 3  |
| BENZENE,1-METHYLETHYL- | 98-82-8    | 1 - < 3  |
| ETHYLBENZENE           | 100-41-4   | 1 - < 3  |
| HEXANE                 | 110-54-3   | 1 - < 3  |
| NAPHTHALENE            | 91-20-3    | < 0.3    |

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

BENZENE (CAS 71-43-2)

BENZENE, DIMETHYL (CAS 1330-20-7)

BENZENE, METHYL- (CAS 108-88-3)

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

ETHYLBENZENE (CAS 100-41-4)

HEXANE (CAS 110-54-3)

NAPHTHALENE (CAS 91-20-3)

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

BENZENE, METHYL- (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

BENZENE, METHYL- (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

BENZENE, METHYL- (CAS 108-88-3) 594

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

BENZENE (CAS 71-43-2) Listed: February 27, 1987

BENZENE,1-METHYLETHYL- (CAS 98-82-8) Listed: April 6, 2010

ETHYLBENZENE (CAS 100-41-4) Listed: June 11, 2004

NAPHTHALENE (CAS 91-20-3) Listed: April 19, 2002

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

BENZENE (CAS 71-43-2) Listed: December 26, 1997

BENZENE, METHYL- (CAS 108-88-3) Listed: January 1, 1991

**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

BENZENE (CAS 71-43-2) Listed: December 26, 1997

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1,2,4-Trimethylbenzene (CAS 95-63-6)

BENZENE (CAS 71-43-2)

BENZENE, DIMETHYL (CAS 1330-20-7)

BENZENE, METHYL- (CAS 108-88-3)

BENZENE,1-METHYLETHYL- (CAS 98-82-8)

Distillates (petroleum), Hydrotreated Heavy Naphthenic (CAS 64742-52-5)

ETHYLBENZENE (CAS 100-41-4)

HEXANE (CAS 110-54-3)

Naphtha (petroleum), Hydrotreated Heavy (CAS 64742-48-9)

NAPHTHALENE (CAS 91-20-3)

Solvent Naphtha (petroleum), Medium Aliph. (CAS 64742-88-7)

Stoddard Solvent (CAS 8052-41-3)

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 08-29-2017

**Version #** 01

**HMIS® ratings** Health: 3  
Flammability: 4  
Physical hazard: 3

**NFPA ratings**

Health: 2  
Flammability: 3  
Instability: 3

**NFPA ratings****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



Revision Number: 006.0

Issue date: 11/02/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |  |                     |               |
|-------------------------------|--|---------------------|---------------|
| <b>Product name:</b>          | <b>LOCTITE 609 RETAINING COMPOUND</b>          | <b>IDH number:</b>  | 135512        |
|                               | <b>known as Loctite(R) 609 Retaining Compo</b> |                     |               |
| <b>Product type:</b>          | Anaerobic Adhesive                             | <b>Item number:</b> | 60931         |
| <b>Restriction of Use:</b>    | None identified                                | <b>Region:</b>      | United States |
| <b>Company address:</b>       | <b>Contact information:</b>                    |                     |               |
| Henkel Corporation            | Telephone: (860) 571-5100                      |                     |               |
| One Henkel Way                | MEDICAL EMERGENCY Phone: Poison Control Center |                     |               |
| Rocky Hill, Connecticut 06067 | 1-877-671-4608 (toll free) or 1-303-592-1711   |                     |               |
|                               | TRANSPORT EMERGENCY Phone: CHEMTREC            |                     |               |
|                               | 1-800-424-9300 (toll free) or 1-703-527-3887   |                     |               |
|                               | Internet: www.henkelna.com                     |                     |               |

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

| HAZARD CLASS                                       | HAZARD CATEGORY |
|--|-----------------|
| SKIN IRRITATION                                    | 2               |
| EYE IRRITATION                                     | 2A              |
| SKIN SENSITIZATION                                 | 1               |
| SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE | 2               |

### PICTOGRAM(S)



### Precautionary Statements

|                    |  |
|--------------------|--|
| <b>Prevention:</b> | Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.   |
| <b>Response:</b>   | IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. |
| <b>Storage:</b>    | Not prescribed   |
| <b>Disposal:</b>   | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.  |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s)      | CAS Number | Percentage* |
|-----------------------------|------------|-------------|
| 2-Hydroxyethyl methacrylate | 868-77-9   | 10 - 20     |
| Poly (ethyl methacrylate)   | 9003-42-3  | 1 - 5       |
| Cumene hydroperoxide        | 80-15-9    | 1 - 5       |
| Saccharin                   | 81-07-2    | 1 - 5       |
| Methacrylic acid            | 79-41-4    | 0.1 - 1     |
| Cumene                      | 98-82-8    | 0.1 - 1     |

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                      |   |
|----------------------|---|
| <b>Inhalation:</b>   | Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.                                      |
| <b>Skin contact:</b> | Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention. |
| <b>Eye contact:</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Ingestion:</b>    | Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.   |
| <b>Symptoms:</b>     | See Section 11.   |

### 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media:</b>               | Water spray (fog), foam, dry chemical or carbon dioxide.   |
| <b>Special firefighting procedures:</b>   | Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.   |
| <b>Unusual fire or explosion hazards:</b> | Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers. In case of fire, keep containers cool with water spray. |
| <b>Hazardous combustion products:</b>     | Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.  |

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

|                                   |   |
|-----------------------------------|---|
| <b>Environmental precautions:</b> | Do not allow product to enter sewer or waterways.   |
| <b>Clean-up methods:</b>          | Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. |

## 7. HANDLING AND STORAGE

**Handling:** Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Refer to Section 8.

**Storage:** For safe storage, store at or below 38 °C (100.4 °F)  
Keep in a cool, well ventilated area away from heat, sparks and open flame.  
Keep container tightly closed until ready for use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous Component(s)      | ACGIH TLV  | OSHA PEL   | AIHA WEEL                                     | OTHER         |
|-----------------------------|------------|--|---|---------------|
| 2-Hydroxyethyl methacrylate | None       | None   | None  | 3 ppm Ceiling |
| Poly (ethyl methacrylate)   | None       | None   | None  | None          |
| Cumene hydroperoxide        | None       | None   | 1 ppm (6 mg/m <sup>3</sup> )<br>TWA<br>(SKIN) | None          |
| Saccharin                   | None       | None   | None  | None          |
| Methacrylic acid            | 20 ppm TWA | None   | None  | None          |
| Cumene                      | 50 ppm TWA | 50 ppm (245 mg/m <sup>3</sup> )<br>PEL<br>(SKIN) | None  | None          |

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:** Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

**Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves. Butyl rubber gloves. Natural rubber gloves. Glove recommendations are based upon permeation study results for similar products.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Physical state:</b>                          | Liquid                                       |
| <b>Color:</b>                                   | Green  |
| <b>Odor:</b>                                    | Mild   |
| <b>Odor threshold:</b>                          | Not available.                               |
| <b>pH:</b>                                      | Not applicable                               |
| <b>Vapor pressure:</b>                          | < 5 mm hg (27 °C (80.6 °F))                  |
| <b>Boiling point/range:</b>                     | > 149 °C (> 300.2 °F)                        |
| <b>Melting point/ range:</b>                    | Not available.                               |
| <b>Specific gravity:</b>                        | 1.1  |
| <b>Vapor density:</b>                           | Not available.                               |
| <b>Flash point:</b>                             | > 93.3 °C (> 199.94 °F) Tagliabue closed cup |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.                               |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.                               |
| <b>Autoignition temperature:</b>                | Not available.                               |
| <b>Flammability:</b>                            | Not applicable                               |
| <b>Evaporation rate:</b>                        | Not available.                               |
| <b>Solubility in water:</b>                     | Slight                                       |
| <b>Partition coefficient (n-octanol/water):</b> | Not available.                               |
| <b>VOC content:</b>                             | 0.22 %; 2.46 g/l                             |

Viscosity: Not available.  
Decomposition temperature: Not available.

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.

**Hazardous reactions:** None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.

**Hazardous decomposition products:** Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

**Incompatible materials:** Strong oxidizing agents.

**Reactivity:** Not available.

**Conditions to avoid:** Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

### Potential Health Effects/Symptoms

**Inhalation:** Inhalation of vapors or mists of the product may be irritating to the respiratory system.  
**Skin contact:** Causes skin irritation. May cause allergic skin reaction.  
**Eye contact:** Causes serious eye irritation.  
**Ingestion:** May cause gastrointestinal tract irritation if swallowed.

| Hazardous Component(s)      | LD50s and LC50s  | Immediate and Delayed Health Effects                           |
|-----------------------------|--|--|
| 2-Hydroxyethyl methacrylate | Oral LD50 (Mouse) = 3,275 mg/kg<br>Oral LD50 (Rat) = 11.2 g/kg<br>Oral LD50 (Rat) = 5,050 mg/kg  | Irritant, Allergen   |
| Poly (ethyl methacrylate)   | None   | Irritant   |
| Cumene hydroperoxide        | Inhalation LC50 (Mouse, 4 h) = 200 mg/l  | Allergen, Central nervous system, Corrosive, Irritant, Mutagen |
| Saccharin                   | Oral LD50 (Mouse) = 17 g/kg  | No Target Organs   |
| Methacrylic acid            | Oral LD50 (Mouse) = 1,332 mg/kg<br>Oral LD50 (Mouse) = 1,600 mg/kg<br>Oral LD50 (Mouse) = 1,250 mg/kg<br>Oral LD50 (Rabbit) = 1,200 mg/kg<br>Oral LD50 (Rat) = 1,060 mg/kg<br>Oral LD50 (Rat) = 2,224 mg/kg<br>Dermal LD50 (Rabbit) = 500 mg/kg<br>Inhalation LC50 (Rat, 4 h) = 7.1 mg/l | Corrosive, Irritant, Allergen                                  |
| Cumene                      | Oral LD50 (Rat) = 2.91 g/kg<br>Oral LD50 (Rat) = 1,400 mg/kg<br>Inhalation LC50 (Rat, 4 h) = 8000 ppm  | Central nervous system, Irritant, Lung                         |

| Hazardous Component(s)      | NTP Carcinogen                                      | IARC Carcinogen | OSHA Carcinogen<br>(Specifically Regulated) |
|-----------------------------|---|-----------------|---|
| 2-Hydroxyethyl methacrylate | No  | No              | No  |
| Poly (ethyl methacrylate)   | No  | No              | No  |
| Cumene hydroperoxide        | No  | No              | No  |
| Saccharin                   | No  | No              | No  |
| Methacrylic acid            | No  | No              | No  |
| Cumene                      | Reasonably Anticipated to be<br>a Human Carcinogen. | Group 2B        | No  |

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III  
DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

### International Air Transportation (ICAO/IATA)

Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

### Water Transportation (IMO/IMDG)

Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

## 15. REGULATORY INFORMATION

### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.  
**TSCA 12 (b) Export Notification:** None above reporting de minimis  
**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Cumene hydroperoxide (CAS# 80-15-9). Saccharin (CAS# 81-07-2).  
**CERCLA Reportable quantity:** Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

### Canada Regulatory Information

**CEPA DSL/NDSL Status:** Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections: 2**

**Prepared by:** Product Safety and Regulatory Affairs

**Issue date:** 11/02/2017

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Revision Number: 001.1

Issue date: 10/28/2014

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |  |                     |               |
|-------------------------------|--|---------------------|---------------|
| <b>Product name:</b>          | <b>Loctite® Extend® Rust Neutralizer</b>                     | <b>IDH number:</b>  | 633877        |
| <b>Product type:</b>          | Rust converter   | <b>Item number:</b> | 633877        |
| <b>Restriction of Use:</b>    | None identified  | <b>Region:</b>      | United States |
| <b>Company address:</b>       | <b>Contact information:</b>                                  |                     |               |
| Henkel Corporation            | Telephone: +1 (800) 624-7767                                 |                     |               |
| One Henkel Way                | MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-    |                     |               |
| Rocky Hill, Connecticut 06067 | 4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY       |                     |               |
|                               | Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 |                     |               |

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**DANGER:** EXTREMELY FLAMMABLE AEROSOL.  
HARMFUL IF SWALLOWED.  
CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE DAMAGE.  
MAY CAUSE DROWSINESS OR DIZZINESS.

| HAZARD CLASS                                     | HAZARD CATEGORY |
|--|-----------------|
| FLAMMABLE AEROSOL                                | 1               |
| ACUTE TOXICITY ORAL                              | 4               |
| SKIN IRRITATION                                  | 2               |
| SERIOUS EYE DAMAGE                               | 1               |
| SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE | 3               |

### PICTOGRAM(S)



### Precautionary Statements

|                    |   |
|--------------------|---|
| <b>Prevention:</b> | Keep away from heat, sparks, open flames, hot surfaces - no smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing mist or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye and face protection. Wear protective gloves.  |
| <b>Response:</b>   | If SWALLOWED: Immediately call poison control or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. Rinse mouth. If skin irritation occurs: Get medical attention. Take off contaminated clothing. |
| <b>Storage:</b>    | Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |
| <b>Disposal:</b>   | Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.   |

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s)   | CAS Number | Percentage* |
|--|------------|-------------|
| Acetone  | 67-64-1    | 30 - 60     |
| 2-Butoxyethanol  | 111-76-2   | 10 - 30     |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | 27360-07-2 | 1 - 5       |
| Formic acid  | 64-18-6    | 1 - 5       |
| Propane/Isobutane  | 68476-86-8 | 10 - 30     |

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Seek medical advice. |
| <b>Skin contact:</b> | Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.                  |
| <b>Eye contact:</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.   |
| <b>Ingestion:</b>    | DO NOT induce vomiting unless directed to do so by medical personnel. If symptoms develop and persist, get medical attention.  |
| <b>Symptoms:</b>     | See Section 11.  |

### 5. FIRE FIGHTING MEASURES

|   |  |
|---|--|
| <b>Extinguishing media:</b>               | Carbon dioxide. Dry chemical. foam   |
| <b>Special firefighting procedures:</b>   | Use water spray to keep fire exposed containers cool and disperse vapors. Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.   |
| <b>Unusual fire or explosion hazards:</b> | Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. |
| <b>Hazardous combustion products:</b>     | Oxides of carbon. Hydrocarbons Butyraldehyde. Butyric acid. Acrolein. Aldehydes. Ketones. Organic acids.   |

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

|                                   |  |
|-----------------------------------|--|
| <b>Environmental precautions:</b> | Do not allow material to contaminate ground water system. Do not let product enter drains.   |
| <b>Clean-up methods:</b>          | Absorb the spilled material with an inert absorbent (nonflammable) material. Remove the absorbed material, and place in an appropriate chemical waste container for disposal. Eliminate ignition sources including sources of electrical, static or frictional sparks. |

## 7. HANDLING AND STORAGE

**Handling:** Avoid breathing mists or aerosols of this product. Keep away from sources of ignition - no smoking. Avoid contact with eyes, skin and clothing. Keep out of the reach of children.

**Storage:** Contents under pressure. Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F). Store in a cool, dry, well-ventilated area.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

| Hazardous Component(s)   | ACGIH TLV                   | OSHA PEL                                   | AIHA WEEL | OTHER |
|--|-----------------------------|--|-----------|-------|
| Acetone  | 750 ppm STEL<br>500 ppm TWA | 1,000 ppm (2,400 mg/m <sup>3</sup> ) PEL   | None      | None  |
| 2-Butoxyethanol  | 20 ppm TWA                  | 50 ppm (240 mg/m <sup>3</sup> ) PEL (SKIN) | None      | None  |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | None                        | None                                       | None      | None  |
| Formic acid  | 5 ppm TWA<br>10 ppm STEL    | 5 ppm (9 mg/m <sup>3</sup> ) PEL           | None      | None  |
| Propane/Isobutane  | None                        | None                                       | None      | None  |

**Engineering controls:** Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:** Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| <b>Physical state:</b>                          | Liquid   |
| <b>Color:</b>                                   | Light Grey   |
| <b>Odor:</b>                                    | Acidic, Vinegar-like   |
| <b>Odor threshold:</b>                          | Not available.   |
| <b>pH:</b>                                      | 3.0  |
| <b>Vapor pressure:</b>                          | Not available.   |
| <b>Boiling point/range:</b>                     | Not available.   |
| <b>Melting point/ range:</b>                    | Not available.   |
| <b>Specific gravity:</b>                        | 0.845 - 0.855  |
| <b>Vapor density:</b>                           | Not available.   |
| <b>Flash point:</b>                             | < -6.70 °C (< 19.94 °F)  |
| <b>Flashback:</b>                               | This product exhibits flashback when tested for flame extension. |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.   |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.   |
| <b>Autoignition temperature:</b>                | Not applicable   |
| <b>Evaporation rate:</b>                        | > 1.00   |
| <b>Solubility in water:</b>                     | Not available.   |
| <b>Partition coefficient (n-octanol/water):</b> | Not available.   |
| <b>VOC content:</b>                             | 33.1 %   |
| <b>Viscosity:</b>                               | Not available.   |

**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Stability:</b>                        | Stable under normal conditions of storage and use.   |
| <b>Hazardous reactions:</b>              | Will not occur.  |
| <b>Hazardous decomposition products:</b> | Oxides of carbon. Acrolein. Aldehydes. Ketones. Organic acids.   |
| <b>Incompatible materials:</b>           | Oxidizing agents. Concentrated nitric acid. Sulfuric acid. Alkalis. Acids. Potassium tert-butoxide.      |
| <b>Reactivity:</b>                       | Not available.   |
| <b>Conditions to avoid:</b>              | Keep away from open flames, hot surfaces and sources of ignition. Avoid temperatures above 49°C (120°F). |

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. |
| <b>Skin contact:</b> | May cause skin irritation. Repeated or prolonged contact can result in drying of skin. Symptoms may include redness, burning, drying, cracking and skin burns.                                   |
| <b>Eye contact:</b>  | Direct spray or vapors will irritate and may harm eyes. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.   |
| <b>Ingestion:</b>    | Not a likely route of entry. May be harmful if swallowed. If swallowed, may be aspirated into the lungs resulting in inflammation and possible fluid accumulation.                               |

| Hazardous Component(s)   | LD50s and LC50s   | Immediate and Delayed Health Effects                           |
|--|---|--|
| Acetone  | Oral LD50 (RABBIT) = 5,340 mg/kg<br>Oral LD50 (RAT) = 5,800 mg/kg<br>Oral LD50 (RAT) = 9,800 mg/kg<br>Dermal LD50 (RABBIT) = 20,000 mg/kg<br>Inhalation LC50 (RAT, 8 h) = 50.1 mg/l<br>Inhalation LC50 (RAT, 4 h) = 76 mg/l | Blood, Central nervous system, Irritant, Reproductive          |
| 2-Butoxyethanol  | Oral LD50 (RAT) = 560 mg/kg<br>Oral LD50 (RABBIT) = 0.32 g/kg<br>Oral LD50 (RAT) = 1.48 g/kg<br>Dermal LD50 (RABBIT) = 400 mg/kg<br>Inhalation LC50 (RAT, 4 h) = 486 ppm<br>Inhalation LC50 (RAT, 4 h) = 450 ppm            | Blood, Central nervous system, Irritant, Kidney, Liver         |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | None  | No Records   |
| Formic acid  | Oral LD50 (RAT) = 730 mg/kg<br>Inhalation LC50 (RAT, 15 min) = 15 mg/l<br>Inhalation LC50 (RAT, 4 h) = 7.4 mg/l   | Central nervous system, Corrosive, Irritant, Kidney, Metabolic |
| Propane/Isobutane  | None  | No Records   |

| Hazardous Component(s)   | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--|----------------|-----------------|--|
| Acetone  | No             | No              | No                                       |
| 2-Butoxyethanol  | No             | No              | No                                       |
| Polyvinyl butyral - polyvinyl alcohol - polyvinyl acetate terpolymer | No             | No              | No                                       |
| Formic acid  | No             | No              | No                                       |
| Propane/Isobutane  | No             | No              | No                                       |

**12. ECOLOGICAL INFORMATION**

**Ecological information:** Not available.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

|  |  |
|--|--|
| <b>Recommended method of disposal:</b> | Dispose of according to Federal, State and local governmental regulations.   |
| <b>Hazardous waste number:</b>         | It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24. |

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

|                                    |                     |
|------------------------------------|---------------------|
| <b>Proper shipping name:</b>       | Aerosols, flammable |
| <b>Hazard class or division:</b>   | 2.1                 |
| <b>Identification number:</b>      | UN 1950             |
| <b>Packing group:</b>              | None                |
| <b>DOT Hazardous Substance(s):</b> | Acetone             |

#### International Air Transportation (ICAO/IATA)

|                                  |                     |
|----------------------------------|---------------------|
| <b>Proper shipping name:</b>     | Aerosols, flammable |
| <b>Hazard class or division:</b> | 2.1                 |
| <b>Identification number:</b>    | UN 1950             |
| <b>Packing group:</b>            | None                |

#### Water Transportation (IMO/IMDG)

|                                  |          |
|----------------------------------|----------|
| <b>Proper shipping name:</b>     | AEROSOLS |
| <b>Hazard class or division:</b> | 2.1      |
| <b>Identification number:</b>    | UN 1950  |
| <b>Packing group:</b>            | None     |

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

|   |   |
|---|---|
| <b>TSCA 8 (b) Inventory Status:</b>     | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.   |
| <b>TSCA 12 (b) Export Notification:</b> | None above reporting de minimis   |
| <b>CERCLA/SARA Section 302 EHS:</b>     | None above reporting de minimis   |
| <b>CERCLA/SARA Section 311/312:</b>     | Immediate Health, Delayed Health, Fire, Sudden Release  |
| <b>CERCLA/SARA Section 313:</b>         | This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). 2-Butoxyethanol (CAS# 111-76-2). Formic acid (CAS# 64-18-6). |
| <b>California Proposition 65:</b>       | No California Proposition 65 listed chemicals are known to be present.  |

#### Canada Regulatory Information

|                             |   |
|-----------------------------|---|
| <b>CEPA DSL/NDL Status:</b> | All components are listed on or are exempt from listing on the Canadian Domestic Substances List. |
|-----------------------------|---|

### 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

**Prepared by:** Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

**Issue date:** 10/28/2014

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# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

---

### Section 1 • Product and Company Identification

---

**Product Name:** LPS® HDX

**Part Number(s):** 01020 (aerosol), 01005, 01055, C01020 (aerosol), C01005, C01055

**Chemical Name:** Chlorinated Hydrocarbon (trichloroethylene)

**Product Use:** A degreaser designed to remove grease, oil, dirt and other residues from metal and other hard surfaces near ignition sources.

**Manufacturer Information:** LPS Laboratories, 4647 Hugh Howell Road, Tucker, GA, USA 30084  
**TEL:** USA & Canada: 1 800 241-8334  
Outside USA and Canada: +1 770 243-8800  
**FAX:** USA & Canada: 1 800 543-1563  
Outside USA and Canada: +1 770 243-8899

**Emergency Telephone Number:** Chemtrec: USA & Canada: 1 800 424-9300  
Outside USA and Canada: +1 703 527-3887

**Website:** <http://www.lpslabs.com>

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### Section 2 • Hazards Identification

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*This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.*

#### Emergency Overview:

**Aerosol:** DANGER: Harmful or fatal if swallowed. Vapor harmful. Contents under pressure. Harmful if inhaled.

**Bulk:** DANGER: Harmful or fatal if swallowed. Vapor harmful. Harmful if inhaled.

**Primary route(s) of entry:** Skin and eye contact. Inhalation.

#### Potential Acute Health Effects:

**Eyes:** Liquid in eyes produces pain and irritation with mild temporary damage possible. Vapor can irritate eyes.

**Skin:** Prolonged or repeated contact of liquid can cause skin irritation, defatting of the skin and dermatitis. Absorption of liquid through intact skin is possible, causing systemic poisoning but this is an unlikely route of significant toxic exposure.

**Inhalation:** High concentrations of vapor, in excess of the occupational exposure limit, will lead to adverse effects on the central nervous system, causing nausea, headaches, dizziness and lightheadedness (concentrations in excess of 300 ppm). Higher concentrations, around 5000 ppm and above, will cause anesthetic effects, leading to unconsciousness and in extreme cases, coma and death. Very high exposures may cause an abnormal heart rhythm and prove suddenly fatal.

**Ingestion:** Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation. May cause injury if aspirated into lungs causing adverse health effects as described in the inhalation section above.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Potential Chronic Health Effects:

#### Carcinogenic Effects: See Section 11

NTP: Suspect carcinogen

IARC: Group 2A

OSHA: No

ACGIH: No

**Mutagenic Effects:** Has been linked to mutagenic effects in humans.

**Teratogenic Effects:** Did not cause birth defects in laboratory animals. Has been toxic to the fetus in laboratory animals at levels toxic to the mother.

**Target Organs:** In animals, effects have been reported on the following organs: kidney, liver, central nervous system, peripheral nervous system.

#### Medical conditions aggravated by exposure:

Repeated exposure to high levels produces adverse effects on the liver and, to a lesser extent on the kidney. A condition known as "Degreaser's Flush", a pronounced redness of the skin, may occur on the face, hands, arms, feet and trunk of some individuals following repeated exposure to trichloroethylene and the consumption of alcohol. This effect can intensify over for 30 minute period but usually disappears completely after 1 hour. These symptoms may occur up to 6 weeks after the last exposure to trichloroethylene and can reoccur if exposure continues.

#### Interactions with other chemicals which enhance toxicity:

Consumption of alcoholic beverages may increase potential for development of toxic effects resulting from exposure to this product.

#### Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high vapor concentrations may cause headaches, stupor, irritation of throat and eyes, and kidney effects.

### Section 3 • Composition / Information on Ingredients

| Component                     | CASRN    | Weight Percent |
|-------------------------------|----------|----------------|
| Trichloroethylene             | 79-01-6  | 90 - 100%      |
| Carbon Dioxide (aerosol only) | 124-38-9 | 1 - 10%        |

### Section 4 • First Aid Measures

**Eyes:** Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. DO NOT use eye ointment. Seek medical attention immediately.

**Skin:** Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

**Inhalation:** Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

**Ingestion:** DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.

**Notes to Physician:** Gastric lavage may be effective within four hours of ingestion. Aspiration hazard should be weighed against toxicity concerns. Chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur. Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators. Do not allow exposed person to exercise vigorously for 24 hours following potentially toxic exposure. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 5 • Fire Fighting Measures

|                                    |  |   |      |
|------------------------------------|--|---|------|
| <b>Products of Combustion:</b>     | Carbon monoxide, carbon dioxide, chlorine, hydrogen chloride and traces of phosgene.   |   |      |
| <b>General Fire Hazards:</b>       | High heat will cause product to boil, evolving vapor that could cause explosive rupture of closed containers.  |   |      |
| <b>Firefighting media:</b>         | SMALL FIRE: Use DRY chemical powder.<br>LARGE FIRE: Use CO2, water spray, fog or foam. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosions.                        |   |      |
| <b>Sensitivity to Impact:</b>      | None   | <b>Sensitivity to Static Discharge:</b> | None |
| <b>Protection Clothing (Fire):</b> | Concentrated vapors can be ignited by high intensity ignition source. Firefighters should wear self-contained, positive pressure breathing apparatus and full protective clothing due to thermal decomposition products. |   |      |

#### Special Remarks on Explosion Hazards:

Explosive mixtures of trichloroethylene and air can be formed but are difficult to ignite and require high intensity sources of heat such as welding arcs, sparks and flames or high temperatures and pressures; addition of small amounts of flammable substances to trichloroethylene (such as flammable liquids or gases) and/or an increase in the oxygen content of the local atmosphere may strongly enhance these effects. Welding or cutting should not be carried out on any vessel likely to contain solvent because of the risk of explosion. Thermal decomposition will evolve toxic and corrosive vapors of hydrogen chloride and phosgene. Containers may burst if overheated due to thermal expansion of the contents.

### Section 6 • Accidental Release Measures

|                                |  |  |
|--------------------------------|--|--|
| <b>Containment Procedures:</b> | <b>Small Spill and Leak:</b>   | Absorb with an inert material and dispose of properly.   |
|                                | <b>Large Spill and Leak:</b>   | Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Do not allow to enter drains, sewers or waterways. Spillages or uncontrolled discharges into waterways must be alerted to the Environment Agency or other appropriate regulatory body. |
| <b>Clean-Up Procedures:</b>    | Recover free product and place in a suitable container for disposal.           |  |
| <b>Evacuation Procedures:</b>  | Ventilate area of leak or spill. Keep unnecessary and unprotected people away. |  |
| <b>Special Procedures:</b>     | Ventilate area. Wear personal protective equipment during cleanup.             |  |



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 7 • Handling and Storage

**Handling:** DO NOT breathe vapors. Use only in well ventilated areas. Avoid contact with skin and eyes. Avoid contact with naked flames and hot surfaces as toxic and corrosive decomposition products (hydrogen chloride) can be formed. The vapor is heavier than air and may reach dangerously high concentrations in pits, tanks and other confined spaces. In such cases, provide adequate ventilation or wear suitable respiratory protective equipment with positive air supply. When using, do not smoke. When welding metals degreased with trichloroethylene, special care is needed to ensure all solvent has evaporated from the components. Separate cleaning and welding areas. Ensure vapors from degreasing operations do not enter welding areas - welding arcs can cause trichloroethylene vapors to break down producing toxic vapors.

**Storage:** Keep container dry. Keep in a cool, well ventilated place. Keep away from direct sunlight. Keep away from heat and ignition sources.

**Precautions to be taken in handling and storage:**

Store aerosols as Level 1 Aerosol (NFPA 30B). Store all materials in a dry, well-ventilated area. Avoid breathing vapors.

### Section 8 • Exposure Controls / Personal Protection

**Exposure Guidelines:**

| Component                     | CASRN    | OSHA                       | ACGIH                          | NIOSH                          | Supplier      |
|-------------------------------|----------|----------------------------|--------------------------------|--------------------------------|---------------|
| Trichloroethylene             | 79-01-6  | 100 ppm PEL<br>200 ppm PEL | 50 ppm TLV<br>100 ppm TLV      | Not established                | None reported |
| Carbon Dioxide (aerosol only) | 124-38-9 | 5000 ppm PEL               | 5000 ppm TLV<br>30000 ppm STEL | 5000 ppm TWA<br>30000 ppm STEL | None reported |

**Engineering Controls:** Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines listed above. Lethal concentrations may exist in areas with poor ventilation.

**Personal protective equipment**

**Eye protection:** Safety glasses with side shields conforming to appropriate regulations. Eye wash fountain and emergency shower facilities are recommended.

**Hand protection:** Use chemically resistant protective gloves conforming to appropriate regulations. Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves.

**Respiratory protection:** If airborne concentrations are above the applicable exposure limits (listed above), use NIOSH approved respiratory protection (i.e. organic vapor cartridge).

**General Hygiene Considerations:** Wash thoroughly after handling. Have eye-wash facilities immediately available.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 9 • Physical and Chemical Properties

|                                  |  |   |                             |
|----------------------------------|--|---|-----------------------------|
| <b>Appearance:</b>               | Clear liquid   | <b>Color:</b>                                 | Clear, light brown          |
| <b>Odor:</b>                     | Sweet, spice   | <b>Evaporation Rate:</b>                      | 0.3 (Ethyl Ether = 1)       |
| <b>Solubility Description:</b>   | 0.1% in water  | <b>Flash Point:</b>                           | None                        |
| <b>Boiling Point:</b>            | 87°C (189°F)   | <b>Flash Point Method:</b>                    | Tag-Closed Cup              |
| <b>Specific Gravity (H2O=1):</b> | 1.41 - 1.47 @ 20°C   | <b>Decomposition Temperature:</b>             | Not established             |
| <b>Vapor Density (air = 1):</b>  | 4.5  | <b>Auto ignition temperature:</b>             | > 420°C (788°F)             |
| <b>Vapor Pressure:</b>           | 58 mm Hg @ 20°C  | <b>Flammable limits (estimated):</b>          | LOWER: 8.0%<br>UPPER: 10.5% |
| <b>Rule 1171 PPC:</b>            | Not established  | <b>Partition Coefficient (octanol/water):</b> | 2.4                         |
| <b>V.O.C. Content:</b>           | Aerosol: 97.8%, 1414 g/L, 11.8 lb/gal per CARB/OTC/EPA<br>Bulk: 100%, 1446 g/L, 12.1 lb/gal per CARB/OTC/EPA | <b>Odor Threshold:</b>                        | Not established             |
| <b>Melting Point:</b>            | Not established  | <b>Viscosity:</b>                             | 0.53 cPs @ 25°C             |
| <b>pH:</b>                       | Not applicable   | <b>Volatiles:</b>                             | 100%                        |
| <b>Heat of combustion:</b>       | Aerosol: < 20 kJ/g<br>Bulk: < 20 kJ/g  |   |                             |

### Section 10 • Stability and Reactivity

|                                  |   |
|----------------------------------|---|
| <b>Chemical Stability:</b>       | Product is stable under recommended storage conditions.   |
| <b>Conditions to Avoid:</b>      | Keep away from red hot surfaces, sparks or naked flames which may generate toxic fumes of phosgene and hydrogen chloride. Prolonged contact with aluminum or light alloys may cause a reaction resulting in the generation of hydrogen chloride gas and heat. |
| <b>Incompatibility:</b>          | Extremely reactive or incompatible with oxidizing agents. Reacts violently with sodium, potassium and barium metal. Reacts with finely divided aluminium, zinc and magnesium.   |
| <b>Hazardous Decomposition:</b>  | Combustion will generate smoke, possibly thick and choking, resulting in zero visibility and combustion products include hydrogen chloride and traces of phosgen gas.   |
| <b>Hazardous Polymerization:</b> | Will not occur.   |



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 11 • Toxicological Information

#### Acute and Chronic Toxicity

##### A: General Product Information

An acute toxicity study of this product has not been conducted. Information given in this section relates only to individual constituents contained in this preparation.

Trichloroethylene: 200 ppm causes mild eye irritation, 400 ppm causes slight eye irritation and minimal lightheadedness after 3 hours. 1,000 to 1,200 ppm after 6 minutes causes eye and nasal irritation, lightheadedness and dizziness. 2,000 ppm cannot generally be tolerated, is irritating to the eyes and respiratory tract and causes drowsiness, dizziness and nausea within 5 minutes. Ventricular arrhythmias and very rapid respiration have been observed in individuals exposed to 15,000 ppm. High concentrations or prolonged overexposure can cause unconsciousness and death.

##### B: Component Analysis

| Component                     | CASRN    | LC-50                         | LD-50                            |
|-------------------------------|----------|-------------------------------|----------------------------------|
| Trichloroethylene             | 79-01-6  | 12500 ppm / rat / 4 hr*       | 4920 mg/kg / oral / rat*         |
|                               |          |                               | ~ 10000 mg/kg / dermal / rabbit* |
| Carbon Dioxide (aerosol only) | 124-38-9 | 470000 ppm / rat / 30 minutes | Not appropriate                  |

\* Supplier Data

##### Carcinogenicity:

Trichloroethylene has been shown to cause cancer in animals. Mechanistic studies have shown that some of these observations are not relevant to humans. Some experts believe that repeated exposure to high concentrations of trichloroethylene may cause kidney cancer, although the evidence for a causal relationship between these events is not conclusive.

The International Agency for Research on Cancer (IARC) has concluded that with respect to trichloroethylene, there is sufficient evidence of carcinogenicity to experimental animals and limited evidence of carcinogenicity to humans, resulting in a classification in Group 2A as a substance probably carcinogenic to humans. NTP has classified trichloroethylene as reasonably anticipated to be a human carcinogen. Although ACGIH currently does not consider trichloroethylene as a carcinogen, the ACGIH TLV Committee has placed this substance on the Notice of Intended Changes (NIC) list with a proposed change in the carcinogenicity classification from A5 to A2. Although this change is proposed, the A2 classification may or may not be adopted at some time in the future.

##### Mutagenicity:

Rodent - rat / 1000 ppm / 4 hr Brain and Coverings - Changes in surface EEG Peripheral Nerve and Sensation - Sensory syndrome diagnostic of central lesion Sense Organs and Special Senses (Eye) RTECS# KX4550000. Trichloroethylene has been linked to mutagenic effects in humans. Some studies measuring DNA damage (strand breaks, unscheduled DNA synthesis, in-vitro and in-vivo micronucleus and chromosomal aberrations) have been positive.

##### Neurotoxicity:

Rat / 1000 ppm / 4 hr Brain and Coverings - Changes in surface EEG Peripheral Nerve and Sensation - Sensory syndrome diagnostic of central lesion Sense Organs and Special Senses (Eye) RTECS# KX4550000.

##### Reproductive Toxicity:

Did not cause birth defects in laboratory animals; has been toxic to the fetus in laboratory animals at levels toxic to the mother.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 12 • Ecological Information

**Mobility:** Semi-volatile. Readily absorbed into soil. **Persistence / Degradability:** Only slightly biodegradable

**Bioaccumulative potential:** No bioaccumulation potential **Other adverse effects:** Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment. This product has potential for leaching.

#### Environmental Fate:

When released into the soil, trichloroethylene is expected to quickly evaporate, but large spills have potential to leach into groundwater. When released to water, trichloroethylene will quickly evaporate but large spills are expected to be slightly toxic to aquatic life. When released into the air, trichloroethylene is expected to have a half-life between 1 and 10 days.

#### Environmental Toxicity:

The LC50/96 hr values for trichloroethylene in fish are between 10 and 100 mg/L. Trichloroethylene has an experimentally determined bioconcentration factor (BCF) of less than 100 and is not expected to significantly bioaccumulate.

#### Ecotoxicity

| Effects on Organisms       | Component         | CASRN   | Test       | Species                     | Results         |
|----------------------------|-------------------|---------|------------|-----------------------------|-----------------|
| Acute Toxicity on Fishes   | Trichloroethylene | 79-01-6 | 96-hr LC50 | Pimephales Promelas         | 41 - 67 mg/L*   |
| Acute Toxicity on Daphnia  | Trichloroethylene | 79-01-6 | 48-hr LC50 | Daphnia Magna               | 2.2 - 100 mg/L* |
| Bacterial Inhibition       | Trichloroethylene | 79-01-6 | EC50       | Unidentified microorganism  | 260 mg/L*       |
| Growth inhibition of algae | Trichloroethylene | 79-01-6 | 24-hr LC50 | Algae                       | 410 mg/L*       |
| Bioaccumulation in fish    | Trichloroethylene | 79-01-6 | BCF        | Fish (unidentified species) | 17 - 90*        |

\* Supplier Data

### Section 13 • Disposal Considerations

**Waste Status:** Aerosol cans, if depressurized and emptied to less than 1 inch (2.54 cm) of fluid contents, are classified as non-hazardous waste under 40 CFR 261.7 (U.S.). If disposed of in its received form, the aerosol product carries the waste codes D040 and D003 (U.S.). If disposed of in its received form, the bulk product carries the waste code D040.

**Disposal:** Waste must be disposed of in accordance with any and all applicable environmental control rules and/or regulations.

**Note:** Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 14 • Transport Information

#### Aerosol

|                     |                       |   |                      |                      |
|---------------------|-----------------------|---|----------------------|----------------------|
| D.O.T. Ground       | Shipping Name:        | Consumer Commodity  | UN No.:              | NA                   |
|                     | Hazard Class:         | ORM-D   | Technical Name:      | NA                   |
|                     | Subclass:             | NA  | Hazard Label:        | ORM-D Already on box |
|                     | Packing Group:        | NA  |                      |                      |
| Road/Rail - ADR/RID | UN No.:               | 1950  | ADR Class:           | 2                    |
|                     | Packing Group:        | NA  | Classification Code: | 5T                   |
|                     | Name and description: | AEROSOLS, toxic   | Hazard ID No.:       | NA                   |
|                     | Labeling:             | 2.2, 6.1  | Technical Name:      | NA                   |
| IMDG-IMO            | UN No.:               | 1950  | Class:               | 2                    |
|                     | Shipping Name:        | Aerosols  | Subsidiary Risk:     | 6.1                  |
|                     | Labeling:             | 2   | Packing Group:       | NA                   |
|                     | Packing Instructions: | P003, LP02  | EmS:                 | F-D, S-U             |
| IATA - ICAO:        | Marine pollutant:     | No  | Technical Name:      | NA                   |
|                     | UN No.:               | 1950  | Class:               | 2.2                  |
|                     | Shipping Name:        | Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III | Subclass:            | 6.1                  |
|                     | Packing Instructions: | 203, Y203 (Ltd. Qty.)   | Packing Group:       | III                  |
|                     | Labeling:             | Non-flammable Gas & Toxic   | Technical Name:      | NA                   |

#### Bulk

|                     |                       |                   |                      |          |
|---------------------|-----------------------|-------------------|----------------------|----------|
| D.O.T. Ground       | Shipping Name:        | Trichloroethylene | UN No.:              | 1710     |
|                     | Hazard Class:         | 6.1               | Technical Name:      | NA       |
|                     | Subclass:             | NA                | Hazard Label:        | 6.1      |
|                     | Packing Group:        | NA                |                      |          |
| Road/Rail - ADR/RID | UN No.:               | 1710              | ADR Class:           | 6.1      |
|                     | Packing Group:        | III               | Classification Code: | T1       |
|                     | Name and description: | Trichloroethylene | Hazard ID No.:       | NA       |
|                     | Labeling:             | 6.1               | Technical Name:      | NA       |
| IMDG-IMO            | UN No.:               | 1710              | Class:               | 6.1      |
|                     | Shipping Name:        | Trichloroethylene | Subsidiary Risk:     | NA       |
|                     | Labeling:             | 6.1               | Packing Group:       | III      |
|                     | Packing Instructions: | P001, LP01        | EmS:                 | F-A, S-A |
| IATA - ICAO:        | Marine pollutant:     | No                | Technical Name:      | NA       |
|                     | UN No.:               | 1710              | Class:               | 6.1      |
|                     | Shipping Name:        | Trichloroethylene | Subclass:            | NA       |
|                     | Packing Instructions: | 655, 663 (CAO)    | Packing Group:       | III      |
|                     | Labeling:             | Toxic             | Technical Name:      | NA       |

The preceding information is subject to change and must be verified prior to shipment. It is the responsibility of anyone offering hazardous materials for shipment to ensure compliance with all applicable regulations.



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 15 • Regulatory Information

#### U.S. Federal Regulations

**RCRA Hazardous Waste No.:** D040, D003 (aerosols only)

**Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA):**  
Trichloroethylene 79-01-6 100 lbs

**Toxic Substances Control Act (TSCA):**  
All components of this product are TSCA inventory listed and/or are exempt.

**Superfund Amendments and Reauthorization Act (SARA) Title III SARA Section 311/312 (40 CFR 370) Hazard Categories:**  
Sudden Release of Pressure (aerosols only), Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

**This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):**  
Trichloroethylene 79-01-6

**Section 112 Hazardous Air Pollutants (HAPs):** Trichloroethylene 79-01-6

#### State Regulations

**California:** This product contains chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.

**California and OTC States:** This product is for manufacturing use only - not for retail sale.

**New Jersey Right to Know:**  
Aerosol: Trichloroethylene 79-01-6 • Butylene Oxide 106-88-7 • Methyl Pyrrole 96-54-8 • Butanone 78-93-3 • Carbon Dioxide 124-38-9

Bulk: Trichloroethylene 79-01-6 • Butylene Oxide 106-88-7 • Methyl Pyrrole 96-54-8 • Butanone 78-93-3

#### International Regulations

**Canadian Environmental Protection Act (CEPA):**  
All of the components of this product are included on the Canadian Domestic Substances list (DSL).

**Canadian Workplace Hazardous Materials Information System WHMIS:**  
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS Classification:**  
Aerosol: Class A, Class D1B, Class D2A, Class D2B



**WHMIS Classification:**  
Bulk: Class D1B, Class D2A, D2B



#### Other Regulations:

Montreal Protocol listed ingredients:  
Stockholm Convention listed ingredients:  
Rotterdam Convention listed ingredients:  
RoHS Compliant:

None  
None  
None  
Yes



# MATERIAL SAFETY DATA SHEET

## LPS® HDX

Revision Date: June 17, 2011

Supersedes: July 12, 2010

### Section 16 • Other Information

| MSDS#: 11020<br>MSDS Preparation<br>Responsible Name:<br>Elena Badiuzzi<br>Compliance Manager<br>Telephone: +1 770 243-8800 | HMIS 1996     |   | HMIS III                 |       | Health | <br>Special | Reactivity |
|---|---------------|---|--------------------------|-------|--------|-------------|------------|
|   | Health:       | 2 | Health:                  | [*] 2 |        |             |            |
|   | Flammability: | 1 | Flammability Aerosol:    | 1     |        |             |            |
|   |               |   | Flammability Bulk:       | 1     |        |             |            |
|   | Reactivity:   | 0 | Physical Hazard Aerosol: | 2     |        |             |            |
|   |               |   | Physical Hazard Bulk:    | 0     |        |             |            |

#### Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Elena Badiuzzi, Compliance Manager  
LPS Laboratories, a division of Illinois Tool Works

# SAFETY DATA SHEET

## Power Steering Stop Leak



### Section 1. Identification

**GHS product identifier** : Power Steering Stop Leak

**Other means of identification** : Not available.

**Product number** : 10008, 10011, 10143, 10144, 10145, 30008, 30008A, 30008R, 30008O, 30011, 30011A, 30011O

#### Relevant identified uses of the substance or mixture and uses advised against

Oil Additive

**Supplier's details** : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

**Emergency telephone number (with hours of operation)** : ChemTel 1-800-255-3924 (USA, Canada, Puerto Rico, US V.I.) 1-813-248-0585 (International). 24 hrs/day, 365 days/year.

### Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

#### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

#### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : None known.





## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not available.  
**Product code** : Not available.

| Ingredient name   | %        | CAS number |
|---|----------|------------|
| Distillates (petroleum), solvent-refined heavy naphthenic | 60 - 100 | 64741-96-4 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.



## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : No specific data.

**Special protective actions for fire-fighters** : No special precaution is required.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name   | Exposure limits   |
|---|---|
| Distillates (petroleum), solvent-refined heavy naphthenic | <b>ACGIH TLV (United States, 3/2012).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction<br><b>NIOSH REL (United States, 6/2009).</b><br>TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist<br><b>OSHA PEL (United States, 6/2010).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. |

- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Red. [Light]
- Odor** : Petroleum.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >260°C (>500°F)
- Flash point** : Closed cup: 223.88°C (435°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.9218
- Solubility** : Not available.
- Solubility in water** : Negligible.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (100°C (212°F)): 0.45 cm<sup>2</sup>/s (45 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

**Conditions to avoid** : No specific data.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                                   | Result      | Species | Dose        | Exposure |
|---|-------------|---------|-------------|----------|
| Distillates (petroleum), solvent-refined heavy naphthenic | LD50 Dermal | Rabbit  | >5000 mg/kg | -        |
|   | LD50 Oral   | Rat     | >5000 mg/kg | -        |

#### Irritation/Corrosion

**Skin** : There is no data available.

**Eyes** : There is no data available.

**Respiratory** : There is no data available.

#### Sensitization

**Skin** : There is no data available.

**Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

|              |   |
|--------------|---|
| Eye contact  | : No known significant effects or critical hazards. |
| Inhalation   | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion    | : No known significant effects or critical hazards. |

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

|                             |   |
|-----------------------------|---|
| Potential immediate effects | : No known significant effects or critical hazards. |
| Potential delayed effects   | : No known significant effects or critical hazards. |

#### Long term exposure

|                             |   |
|-----------------------------|---|
| Potential immediate effects | : No known significant effects or critical hazards. |
| Potential delayed effects   | : No known significant effects or critical hazards. |

#### Potential chronic health effects

|                       |   |
|-----------------------|---|
| General               | : No known significant effects or critical hazards. |
| Carcinogenicity       | : No known significant effects or critical hazards. |
| Mutagenicity          | : No known significant effects or critical hazards. |
| Teratogenicity        | : No known significant effects or critical hazards. |
| Developmental effects | : No known significant effects or critical hazards. |
| Fertility effects     | : No known significant effects or critical hazards. |

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

|   |                               |
|---|-------------------------------|
| Soil/water partition coefficient ( $K_{oc}$ ) | : There is no data available. |
|---|-------------------------------|

|                       |   |
|-----------------------|---|
| Other adverse effects | : No known significant effects or critical hazards. |
|-----------------------|---|



## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | DOT Classification | IMDG           | IATA           |
|----------------------------|--------------------|----------------|----------------|
| UN number                  | Not regulated.     | Not regulated. | Not regulated. |
| UN proper shipping name    | -                  | -              | -              |
| Transport hazard class(es) | -                  | -              | -              |
| Packing group              | -                  | -              | -              |
| Environmental hazards      | No.                | No.            | No.            |
| Additional information     | -                  | -              | -              |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** All components are listed or exempted.  
**United States inventory (TSCA 8b):** All components are listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed





## Section 15. Regulatory information

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Distillates (petroleum), solvent-refined heavy naphthenic

**Pennsylvania** : None of the components are listed.

### California Prop. 65

No products were found.

### International regulations

**International lists** :

- Australia inventory (AICS)**: All components are listed or exempted.
- China inventory (IECSC)**: All components are listed or exempted.
- Japan inventory**: Not determined.
- Korea inventory**: All components are listed or exempted.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
- Philippines inventory (PICCS)**: All components are listed or exempted.
- Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

**Health** : 0 \* **Flammability** : 1 **Physical hazards** : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.





## Section 16. Other information

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

**Health :** 0      **Flammability :** 1      **Instability :** 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

**Date of issue mm/dd/yyyy :** 04/15/2013

**Version :** 1

**Revised Section(s) :** Not applicable.

**Prepared by :** KMK Regulatory Services Inc.

**Key to abbreviations :** ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

Lucas Synthetic SAE 75W-90 Gear Oil



## Section 1. Identification

GHS product identifier : Lucas Synthetic SAE 75W-90 Gear Oil  
Other means of identification : Lucas Synthetic SAE 75W-90 Gear Oil  
Product number : 10047, 20047, 10048, 20048, 10072, 10073, 10074, 10652

### Relevant identified uses of the substance or mixture and uses advised against

Lubricating oil.

Supplier's details : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149  
(951) 847-5949  
Markn@lucasoil.com  
7:00A.M. to 5:00P.M. Monday thru Friday

## Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

### GHS label elements

Signal word : No signal word.  
Hazard statements : No known significant effects or critical hazards.

### Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.  
Prevention : Not applicable.  
Response : Not applicable.  
Storage : Not applicable.  
Disposal : Not applicable.  
Hazards not otherwise classified : None known.





## Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
Other means of identification : Lucas Synthetic SAE 75W-90 Gear Oil

### CAS number/other identifiers

CAS number : Not applicable.  
Product code : 10047, 20047, 10048, 20048, 10072, 10073, 10074, 10652

| Ingredient name  | %                 | CAS number               |
|--|-------------------|--------------------------|
| 1-Decene, homopolymer, hydrogenated<br>Antimony, dialkyl dithiocarbamate | 60 - 100<br>1 - 5 | 68037-01-4<br>15890-25-2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Wash contaminated skin with soap and water. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



## Section 4. First aid measures

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
metal oxide/oxides

- Special protective actions for fire-fighters** : No special precaution is required.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.



## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name                   | Exposure limits   |
|-----------------------------------|---|
| Antimony, dialkyl dithiocarbamate | ACGIH TLV (United States, 3/2012).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hours.<br>NIOSH REL (United States, 6/2009).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 10 hours.<br>OSHA PEL (United States, 6/2010).<br>TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hours. |

- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.



## Section 8. Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Amber.
- Odor** : Petroleum. Sulfur.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >260°C (>500°F)
- Flash point** : Closed cup: 198.889°C (390°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.8939
- Solubility** : Negligible at 25°C
- Solubility in water** : 0 g/l
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (100°C (212°F)): 0.15 cm<sup>2</sup>/s (15 cSt)



## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Excessive heat.
- Incompatible materials** : Reactive or incompatible with the following materials: Strong oxidizers.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name           | Result                   | Species       | Dose                       | Exposure |
|-----------------------------------|--------------------------|---------------|----------------------------|----------|
| Antimony, dialkyl dithiocarbamate | LD50 Dermal<br>LD50 Oral | Rabbit<br>Rat | 16000 mg/kg<br>16400 mg/kg | -<br>-   |

#### Irritation/Corrosion

- Skin** : There is no data available.
- Eyes** : There is no data available.
- Respiratory** : There is no data available.

#### Sensitization

- Skin** : There is no data available.
- Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available. Specific target organ toxicity (repeated exposure) There is no data available.

#### Aspiration hazard

| Name                                | Result                         |
|-------------------------------------|--------------------------------|
| 1-Decene, homopolymer, hydrogenated | ASPIRATION HAZARD - Category 1 |



## Section 11. Toxicological information

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

Eye contact : No known significant effects or critical hazards.  
Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
Skin contact : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.  
Inhalation : No known significant effects or critical hazards.  
Skin contact : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects : No known significant effects or critical hazards.  
Potential delayed effects : No known significant effects or critical hazards.

#### Long term exposure

Potential immediate effects : No known significant effects or critical hazards.  
Potential delayed effects : No known significant effects or critical hazards.

### Potential chronic health effects

General : No known significant effects or critical hazards.  
Carcinogenicity : No known significant effects or critical hazards.  
Mutagenicity : No known significant effects or critical hazards.  
Teratogenicity : No known significant effects or critical hazards.  
Developmental effects : No known significant effects or critical hazards.  
Fertility effects : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential



## Section 12. Ecological information

There is no data available.

### Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ ) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| DOT Classification         |                | IMDG           | IATA           |
|----------------------------|----------------|----------------|----------------|
| UN number                  | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name    | -              | -              | -              |
| Transport hazard class(es) | -              | -              | -              |
| Packing group              | -              | -              | -              |
| Environmental hazards      | No.            | No.            | No.            |
| Additional information     | -              | -              | -              |

**Special precautions for user** : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.





## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
United States inventory (TSCA 8b): All components are listed or exempted.  
Clean Water Act (CWA) 307: Antimony, dialkyl dithiocarbamate

**Clean Air Act Section 112** : Listed  
**(b) Hazardous Air Pollutants (HAPs)**

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### SARA 313

|                                 | Product name                      | CAS number | %     |
|---------------------------------|-----------------------------------|------------|-------|
| Form R - Reporting requirements | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |
| Supplier notification           | Antimony, dialkyl dithiocarbamate | 15890-25-2 | 1 - 5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Antimony, dialkyl dithiocarbamate

**Pennsylvania** : The following components are listed: Antimony, dialkyl dithiocarbamate

### California Prop. 65

No products were found.

### International regulations





## Section 15. Regulatory information

- International lists** : Australia inventory (AICS): All components are listed or exempted.  
China inventory (IECSC): All components are listed or exempted.  
Japan inventory: Not determined.  
Korea inventory: All components are listed or exempted.  
Malaysia Inventory (EHS Register): Not determined.  
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.  
Philippines inventory (PICCS): All components are listed or exempted.  
Taiwan inventory (CSNN): Not determined.
- Chemical Weapons Convention List Schedule I Chemicals** : Not listed
- Chemical Weapons Convention List Schedule II Chemicals** : Not listed
- Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health : 0      Flammability : 1      Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

Health : 0      Flammability : 1      Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

- Date of issue mm/dd/yyyy** : 06/16/2013
- Version** : 1
- Revised Section(s)** : Not applicable.
- Prepared by** : KMK Regulatory Services Inc.
- Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations





## Section 16. Other information

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.





# SAFETY DATA SHEET

## 1. Identification

|  |  |   |
|--|--|---|
| Product identifier                                     | Heavy Duty Corrosion Inhibitor                               |   |
| Other means of identification                          |  |   |
| Product code   | 76026  |   |
| Recommended use  | Corrosion inhibitor  |   |
| Recommended restrictions                               | None known.  |   |
| Manufacturer/Importer/Supplier/Distributor information |  |   |
| Manufactured or sold by:                               |  |   |
| Company name   | CRC Canada Co.   |   |
| Address  | 2-1246 Lorimar Dr.<br>Mississauga, Ontario L5S 1R2<br>Canada |   |
| Telephone  | 905-670-2291   |   |
| Website  | www.crc-canada.ca  |   |
| E-mail   | Support.CA@crcindustries.com                                 |   |
| Emergency phone number                                 | 24-Hour Emergency<br>(CHEMTREC)                              | 800-424-9300 (Canada)<br>703-527-3887 (International) |

## 2. Hazard(s) identification

|                       |  |                                     |
|-----------------------|--|-------------------------------------|
| Physical hazards      | Flammable aerosols                                     | Category 1                          |
|                       | Gases under pressure                                   | Liquefied gas                       |
|                       | Physical hazards not otherwise classified              | Category 1                          |
| Health hazards        | Skin corrosion/irritation                              | Category 2                          |
|                       | Serious eye damage/eye irritation                      | Category 2A                         |
|                       | Reproductive toxicity (fertility)                      | Category 2                          |
|                       | Specific target organ toxicity, single exposure        | Category 3 narcotic effects         |
|                       | Specific target organ toxicity, repeated exposure      | Category 1 (central nervous system) |
|                       | Aspiration hazard                                      | Category 1                          |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard     | Category 2                          |
|                       | Hazardous to the aquatic environment, long-term hazard | Category 2                          |

### Label elements



### Signal word

Danger

### Hazard statement

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility. Causes damage to organs (central nervous system) through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement****Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

**Response**

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. In case of leakage, eliminate all ignition sources. Collect spillage.

**Storage**

Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Do not expose to temperatures exceeding 50°C/122°F.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

None known.

---

**3. Composition/information on ingredients**
**Mixtures**

| Chemical name  | Common name and synonyms | CAS number | %       |
|--|--------------------------|------------|---------|
| liquefied petroleum gas                                |                          | 68476-86-8 | 20 - 30 |
| naphtha (petroleum), hydrotreated light                |                          | 64742-49-0 | 10 - 20 |
| stoddard solvent                                       |                          | 8052-41-3  | 10 - 20 |
| 2-methylpentane  |                          | 107-83-5   | 5 - 10  |
| distillates (petroleum), hydrotreated light            |                          | 64742-47-8 | 5 - 10  |
| dipropylene glycol monomethyl ether                    |                          | 34590-94-8 | 3 - 5   |
| naphtha (petroleum), hydrotreated heavy                |                          | 64742-48-9 | 1 - 3   |
| n-hexane   |                          | 110-54-3   | 1 - 3   |
| distillates (petroleum), hydrotreated heavy paraffinic |                          | 64742-54-7 | < 1     |
| distillates (petroleum), hydrotreated light paraffinic |                          | 64742-55-8 | < 1     |
| petrolatum, micro soft wax                             |                          | 8009-03-8  | < 1     |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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**4. First-aid measures**
**Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed**

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

**Indication of immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

|                            |  |
|----------------------------|--|
| <b>General information</b> | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |
|----------------------------|--|

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.   |
| <b>Fire fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.  |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.   |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| <b>Methods and materials for containment and cleaning up</b>               | Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.   |
| <b>Environmental precautions</b>   | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.   |

## 7. Handling and storage

|                                      |  |
|--------------------------------------|--|
| <b>Precautions for safe handling</b> | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
|--------------------------------------|--|

**Conditions for safe storage,  
including any incompatibilities**

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****ACGIH****Components****Type****Value****Form**distillates (petroleum),  
hydrotreated heavy  
paraffinic (CAS 64742-54-7)

TWA

5 mg/m3

Inhalable fraction

**US. ACGIH Threshold Limit Values****Components****Type****Value****Form**2-methylpentane (CAS  
107-83-5)

STEL

1000 ppm

dipropylene glycol  
monomethyl ether (CAS  
34590-94-8)

TWA

500 ppm

STEL

150 ppm

distillates (petroleum),  
hydrotreated heavy  
paraffinic (CAS 64742-54-7)

TWA

100 ppm

TWA

5 mg/m3

Inhalable fraction.

distillates (petroleum),  
hydrotreated light paraffinic  
(CAS 64742-55-8)

TWA

5 mg/m3

Inhalable fraction.

n-hexane (CAS 110-54-3)

TWA

50 ppm

petrolatum, micro soft wax  
(CAS 8009-03-8)

TWA

5 mg/m3

Inhalable fraction.

stoddard solvent (CAS  
8052-41-3)

TWA

100 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)****Components****Type****Value****Form**2-methylpentane (CAS  
107-83-5)

STEL

3500 mg/m3

TWA

1000 ppm

1760 mg/m3

500 ppm

dipropylene glycol  
monomethyl ether (CAS  
34590-94-8)

STEL

909 mg/m3

TWA

150 ppm

606 mg/m3

100 ppm

distillates (petroleum),  
hydrotreated light (CAS  
64742-47-8)

TWA

200 mg/m3

Vapor.

distillates (petroleum),  
hydrotreated light paraffinic  
(CAS 64742-55-8)

STEL

10 mg/m3

Mist.

naphtha (petroleum),  
hydrotreated heavy (CAS  
64742-48-9)

TWA

5 mg/m3

TWA

1590 mg/m3

Mist.

naphtha (petroleum),  
hydrotreated light (CAS  
64742-49-0)

TWA

400 ppm

1590 mg/m3

400 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

| Components                                 | Type | Value                | Form  |
|--|------|----------------------|-------|
| n-hexane (CAS 110-54-3)                    | TWA  | 176 mg/m3<br>50 ppm  | Mist. |
| petrolatum, micro soft wax (CAS 8009-03-8) | STEL | 10 mg/m3             |       |
| stoddard solvent (CAS 8052-41-3)           | TWA  | 5 mg/m3              |       |
|  | TWA  | 572 mg/m3<br>100 ppm |       |

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

| Components  | Type | Value     | Form         |
|---|------|-----------|--------------|
| 2-methylpentane (CAS 107-83-5)  | TWA  | 200 ppm   | Mist.        |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | STEL | 150 ppm   |              |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm   |              |
|   | TWA  | 1 mg/m3   |              |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            | TWA  | 200 mg/m3 | Non-aerosol. |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | TWA  | 0.2 mg/m3 | Mist.        |
| n-hexane (CAS 110-54-3)   | TWA  | 20 ppm    |              |
| stoddard solvent (CAS 8052-41-3)  | STEL | 580 mg/m3 |              |
|   | TWA  | 290 mg/m3 |              |

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

| Components  | Type | Value    | Form                |
|---|------|----------|---------------------|
| 2-methylpentane (CAS 107-83-5)  | STEL | 1000 ppm |                     |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | TWA  | 500 ppm  |                     |
|   | STEL | 150 ppm  |                     |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm  |                     |
|   | TWA  | 5 mg/m3  | Inhalable fraction. |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | TWA  | 5 mg/m3  | Inhalable fraction. |
| n-hexane (CAS 110-54-3)   | TWA  | 50 ppm   | Inhalable fraction. |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | TWA  | 5 mg/m3  |                     |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 100 ppm  |                     |

**Canada - Ontario**

| Components  | Type | Value    |  |
|---|------|----------|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | STEL | 10 mg/m3 |  |
|   | TWA  | 5 mg/m3  |  |

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

| Components                     | Type | Value    | Form |
|--------------------------------|------|----------|------|
| 2-methylpentane (CAS 107-83-5) | STEL | 1000 ppm |      |

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

| Components  | Type | Value     | Form                |
|---|------|-----------|---------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | TWA  | 500 ppm   | Inhalable fraction. |
|   | STEL | 150 ppm   |                     |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | TWA  | 100 ppm   |                     |
|   | TWA  | 5 mg/m3   |                     |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                | TWA  | 525 mg/m3 |                     |
| n-hexane (CAS 110-54-3)   | TWA  | 50 ppm    |                     |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 100 ppm   |                     |

**Canada - Quebec**

| Components  | Type | Value    |
|---|------|----------|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | STEL | 10 mg/m3 |
|   | TWA  | 5 mg/m3  |

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

| Components  | Type | Value      | Form  |
|---|------|------------|-------|
| 2-methylpentane (CAS 107-83-5)  | STEL | 3500 mg/m3 |       |
|   | TWA  | 1000 ppm   |       |
|   |      | 1760 mg/m3 |       |
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    | STEL | 500 ppm    |       |
|   |      | 909 mg/m3  |       |
|   | TWA  | 150 ppm    |       |
|   |      | 606 mg/m3  |       |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | STEL | 100 ppm    | Mist. |
|   |      | 10 mg/m3   |       |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                | TWA  | 5 mg/m3    | Mist. |
|   |      | 1590 mg/m3 |       |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                | TWA  | 400 ppm    |       |
|   |      | 1590 mg/m3 |       |
| n-hexane (CAS 110-54-3)   | TWA  | 400 ppm    |       |
|   |      | 176 mg/m3  |       |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | STEL | 50 ppm     | Mist. |
|   |      | 10 mg/m3   |       |
| stoddard solvent (CAS 8052-41-3)  | TWA  | 5 mg/m3    | Mist. |
|   |      | 525 mg/m3  |       |
|   |      | 100 ppm    |       |

**Biological limit values**
**ACGIH Biological Exposure Indices**

| Components              | Value    | Determinant                         | Specimen | Sampling Time |
|-------------------------|----------|-------------------------------------|----------|---------------|
| n-hexane (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedio n, without hydrolysis | Urine    | *             |

\* - For sampling details, please see the source document.

## Exposure guidelines

### Canada - Alberta OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### Canada - British Columbia OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### Canada - Manitoba OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Ontario OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Quebec OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Canada - Saskatchewan OELs: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)         | Can be absorbed through the skin. |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                                      | Can be absorbed through the skin. |

### US ACGIH Threshold Limit Values: Skin designation

|  |                                   |
|--|-----------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) | Can be absorbed through the skin. |
| n-hexane (CAS 110-54-3)                              | Can be absorbed through the skin. |

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear protective gloves such as: Neoprene. Nitrile.

**Other** Wear suitable protective clothing.

**Respiratory protection** If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using, do not eat, drink or smoke. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Aerosol.

**Color** Dark amber.

**Odor** Petroleum.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -244.7 °F (-153.7 °C) estimated

|   |  |
|---|--|
| <b>Initial boiling point and boiling range</b>      | 118.4 °F (48 °C) estimated                       |
| <b>Flash point</b>                                  | < 0 °F (< -17.8 °C) Tag Closed Cup               |
| <b>Evaporation rate</b>                             | Fast.  |
| <b>Flammability (solid, gas)</b>                    | Not available.                                   |
| <b>Upper/lower flammability or explosive limits</b> |  |
| <b>Flammability limit - lower (%)</b>               | 0.7 % estimated                                  |
| <b>Flammability limit - upper (%)</b>               | 14 % estimated                                   |
| <b>Vapor pressure</b>                               | 1451.5 hPa estimated                             |
| <b>Vapor density</b>                                | > 1 (air = 1)                                    |
| <b>Relative density</b>                             | 0.72 estimated                                   |
| <b>Solubility(ies)</b>                              |  |
| <b>Solubility (water)</b>                           | Negligible.                                      |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                                   |
| <b>Auto-ignition temperature</b>                    | 404.6 °F (207 °C) estimated                      |
| <b>Decomposition temperature</b>                    | Not available.                                   |
| <b>Viscosity</b>                                    | Not available.                                   |
| <b>Other information</b>                            |  |
| <b>Percent volatile</b>                             | 79.2 % estimated                                 |
| <b>VOC (Weight %)</b>                               | 28.4 % estimated<br>28.4 % Switzerland estimated |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Heat. Contact with incompatible materials.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |
| <b>Hazardous decomposition products</b>   | Carbon oxides.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.                           |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|---|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. |
|-----------------------|---|

| <b>Components</b>                                    | <b>Species</b> | <b>Test Results</b> |
|--|----------------|---------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8) |                |                     |
| <b>Acute</b>   |                |                     |
| <b>Dermal</b>  |                |                     |
| LD50   | Rabbit         | 9510 mg/kg          |

| Components  | Species | Test Results            |
|---|---------|-------------------------|
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 552 ppm                 |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | 5135 mg/kg              |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 5000 mg/kg            |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 15000 mg/kg           |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rat     | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | > 5.2 mg/l, 4 hours     |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg, 2.5 hours |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | > 5 mg/l                |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg            |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 2000 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 61 mg/l, 4 Hours        |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 5000 mg/kg            |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | 61 mg/l, 4 Hours        |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | > 25 ml/kg              |
| n-hexane (CAS 110-54-3)   |         |                         |
| <b><u>Acute</u></b>   |         |                         |
| <b>Dermal</b>   |         |                         |
| LD50  | Rabbit  | > 1300 mg/kg            |
| <b>Inhalation</b>   |         |                         |
| LC50  | Rat     | < 48000 ppm, 4 Hours    |
| <b>Oral</b>   |         |                         |
| LD50  | Rat     | 15840 mg/kg             |

| Components                       | Species | Test Results                       |
|----------------------------------|---------|------------------------------------|
| stoddard solvent (CAS 8052-41-3) |         |                                    |
| <b>Acute</b>                     |         |                                    |
| <b>Dermal</b>                    |         |                                    |
| LD50                             | Rabbit  | > 3000 mg/kg                       |
| <b>Inhalation</b>                |         |                                    |
| LC50                             | Rat     | > 5500 mg/m <sup>3</sup> , 4 hours |
| <b>Oral</b>                      |         |                                    |
| LD50                             | Rat     | > 5000 mg/kg                       |

\* Estimates for product may be based on additional component data not shown.

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | Causes skin irritation.  |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye irritation.   |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>                | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |

#### Carcinogenicity

##### ACGIH Carcinogens

|   |  |
|---|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | A4 Not classifiable as a human carcinogen.                                   |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | A4 Not classifiable as a human carcinogen.                                   |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | A2 Suspected human carcinogen.<br>A4 Not classifiable as a human carcinogen. |

##### Canada - Manitoba OELs: carcinogenicity

|   |  |
|---|--|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | Not classifiable as a human carcinogen.                                |
| distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8) | Not classifiable as a human carcinogen.                                |
| petrolatum, micro soft wax (CAS 8009-03-8)                              | Not classifiable as a human carcinogen.<br>Suspected human carcinogen. |

##### IARC Monographs. Overall Evaluation of Carcinogenicity

|   |   |
|---|---|
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) | 3 Not classifiable as to carcinogenicity to humans. |
| stoddard solvent (CAS 8052-41-3)  | 3 Not classifiable as to carcinogenicity to humans. |

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | Suspected of damaging fertility.   |
| <b>Specific target organ toxicity - single exposure</b>   | May cause drowsiness and dizziness.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Causes damage to organs (central nervous system) through prolonged or repeated exposure. |
| <b>Aspiration hazard</b>                                  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>                                    | Causes damage to organs through prolonged or repeated exposure.                          |

## 12. Ecological information

|                    |  |
|--------------------|--|
| <b>Ecotoxicity</b> | Toxic to aquatic life with long lasting effects. |
|--------------------|--|

| Components                     | Species      | Test Results          |
|--------------------------------|--------------|-----------------------|
| 2-methylpentane (CAS 107-83-5) |              |                       |
| <b>Aquatic</b>                 |              |                       |
| <i>Acute</i>                   |              |                       |
| Crustacea                      | EC50 Daphnia | 1 - 10 mg/l, 48 hours |
| Fish                           | LC50 Fish    | 1 - 10 mg/l, 96 hours |

| Components  | Species |   | Test Results                 |
|---|---------|---|------------------------------|
| dipropylene glycol monomethyl ether (CAS 34590-94-8)                    |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Daphnia   | > 5000 mg/l, 48 hours        |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 10000 mg/l, 96 hours         |
| distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Water flea (Daphnia magna)                          | > 10000 mg/l, 48 hours       |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | > 100 mg/l, 96 hours         |
| distillates (petroleum), hydrotreated light (CAS 64742-47-8)            |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 45 mg/l, 96 hours            |
| naphtha (petroleum), hydrotreated heavy (CAS 64742-48-9)                |         |   |                              |
| Aquatic   |         |   |                              |
| Crustacea   | EC50    | Water flea (Daphnia pulex)                          | 2.7 - 5.1 mg/l, 48 hours     |
| Fish  | LC50    | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours           |
|   |         |   | 8.8 mg/l, 96 hours           |
| naphtha (petroleum), hydrotreated light (CAS 64742-49-0)                |         |   |                              |
| Aquatic   |         |   |                              |
| Acute   |         |   |                              |
| Crustacea   | EC50    | Daphnia   | 1 - 10 mg/l, 48 hours        |
| Fish  | LC50    | Fish  | 1 - 10 mg/l, 96 hours        |
| n-hexane (CAS 110-54-3)   |         |   |                              |
| Aquatic   |         |   |                              |
| Fish  | LC50    | Fathead minnow (Pimephales promelas)                | 2.101 - 2.981 mg/l, 96 hours |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

#### Bioaccumulative potential

##### Partition coefficient n-octanol / water (log Kow)

|                  |             |
|------------------|-------------|
| 2-methylpentane  | 3.74        |
| n-hexane         | 3.9         |
| stoddard solvent | 3.16 - 7.15 |

##### Bioconcentration factor (BCF)

|   |            |
|---|------------|
| naphtha (petroleum), hydrotreated light | 10 - 25000 |
|---|------------|

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal of waste from residues / unused products** Contents under pressure. Do not puncture, incinerate or crush. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### TDG

**UN number** UN1950

|                                     |   |
|-------------------------------------|---|
| <b>UN proper shipping name</b>      | AEROSOLS, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | Not available.  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | 80  |

#### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        | No.   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions.  |
| <b>Cargo aircraft only</b>          | Allowed with restrictions.  |

#### IMDG

|   |   |
|---|---|
| <b>UN number</b>  | UN1950  |
| <b>UN proper shipping name</b>  | AEROSOLS, Limited Quantity  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>  | 2   |
| <b>Subsidiary risk</b>  | -   |
| <b>Packing group</b>  | Not applicable.   |
| <b>Environmental hazards</b>  |   |
| <b>Marine pollutant</b>   | No.   |
| <b>EmS</b>  | Not available.  |
| <b>Special precautions for user</b>   | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not established.  |

---

## 15. Regulatory information

### Canadian regulations

#### Controlled Drugs and Substances Act

Not regulated.

#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto protocol

Not applicable.

#### Montreal Protocol

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

---

**16. Other information**

|                            |  |
|----------------------------|--|
| <b>Issue date</b>          | 10-14-2016   |
| <b>Version #</b>           | 01   |
| <b>Further information</b> | CRC # 522G-H   |
| <b>Disclaimer</b>          | The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Canada Co.. |

SAFETY DATA SHEET

1. Identification

|                                |   |
|--------------------------------|---|
| Product number                 | 10000028754   |
| Product identifier             | 11 OZ NAPA MAC'S OPEN GEAR LUBE 1366  |
| Revision date                  | 09-29-2016  |
| Company information            | NAPA Balkamp<br>2601 Stout Heritage Parkway<br>Plainfield, IN 46168 United States |
| Company phone                  | General Assistance 1-317-754-3900   |
| Emergency telephone US         | 1-866-836-8855  |
| Emergency telephone outside US | 1-952-852-4646  |
| Version #                      | 02  |
| Supersedes date                | 06-17-2016  |
| Recommended use                | LUBRICANT   |
| Recommended restrictions       | None known.   |

2. Hazard(s) identification

|                      |   |            |
|----------------------|---|------------|
| Physical hazards     | Flammable aerosols                                  | Category 1 |
| Health hazards       | Acute toxicity, inhalation                          | Category 4 |
|                      | Skin corrosion/irritation                           | Category 2 |
|                      | Reproductive toxicity (fertility, the unborn child) | Category 2 |
|                      | Aspiration hazard                                   | Category 1 |
| OSHA defined hazards | Not classified.                                     |            |

Label elements



|                         |  |            |
|-------------------------|--|------------|
| Signal word             | Danger   |            |
| Hazard statement        | Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes skin irritation. Harmful if inhaled. Suspected of damaging the unborn child. Suspected of damaging fertility.  |            |
| Precautionary statement |  |            |
| Prevention              | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. |            |
| Response                | If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.   |            |
| Storage                 | Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  |            |
| Disposal                | Dispose of contents/container in accordance with local/regional/national/international regulations.  |            |
| Environmental hazards   | Hazardous to the aquatic environment, acute hazard   | Category 2 |
|                         | Hazardous to the aquatic environment, long-term hazard   | Category 2 |

**Hazard(s) not otherwise classified (HNOC)** Combustible.

**Supplemental information** None.

3. Composition/information on ingredients

Mixtures

| Chemical name                               | Common name and synonyms | CAS number  | %        |
|---|--------------------------|-------------|----------|
| Distillates (Petroleum), Hydrotreated Light |                          | 64742-47-8  | 20 - 40  |
| Asphalt                                     |                          | 8052-42-4   | 10 - 20  |
| Acetone                                     |                          | 67-64-1     | 2.5 - 10 |
| Butane                                      |                          | 106-97-8    | 2.5 - 10 |
| Heptane, branched, cyclic and linear        |                          | 426260-76-6 | 2.5 - 10 |
| Propane                                     |                          | 74-98-6     | 2.5 - 10 |
| Cyclohexane                                 |                          | 110-82-7    | 1 - 2.5  |
| n-Heptane                                   |                          | 142-82-5    | 1 - 2.5  |
| n-Hexane                                    |                          | 110-54-3    | 0.1 - 1  |
| Toluene                                     |                          | 108-88-3    | 0.1 - 1  |
| Other components below reportable levels    |                          |             | 20 - 40  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

|  |   |
|--|---|
| Inhalation   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.   |
| Skin contact   | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.   |
| Eye contact  | Rinse with water. Get medical attention if irritation develops and persists.  |
| Ingestion  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.   |
| Most important symptoms/effects, acute and delayed                     | Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain.  |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.  |
| General information  | IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. |

5. Fire-fighting measures

|   |   |
|---|---|
| Suitable extinguishing media                                  | Alcohol resistant foam. Dry powder. Dry chemicals. Carbon dioxide (CO2).  |
| Unsuitable extinguishing media                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| Specific hazards arising from the chemical                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.   |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| Fire fighting equipment/instructions                          | Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| Specific methods  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.  |
| General fire hazards  | Extremely flammable aerosol.  |

6. Accidental release measures

|   |  |
|---|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.   |
| Methods and materials for containment and cleaning up               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent entry into waterways, sewer, basements or confined areas. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. |
| Environmental precautions   | <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.</p> <p>Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.</p>   |

7. Handling and storage

|  |  |
|--|--|
| Precautions for safe handling                                | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities | <p>Level 3 Aerosol.</p> <p>Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).</p>  |

8. Exposure controls/personal protection

Occupational exposure limits

| US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) |         |            |          |
|---|---------|------------|----------|
| Components  | Type    | Value      |          |
| Acetone (CAS 67-64-1)   | PEL     | 2400 mg/m3 | 1000 ppm |
| Cyclohexane (CAS 110-82-7)  | PEL     | 1050 mg/m3 | 300 ppm  |
| n-Heptane (CAS 142-82-5)  | PEL     | 2000 mg/m3 | 500 ppm  |
| n-Hexane (CAS 110-54-3)   | PEL     | 1800 mg/m3 | 500 ppm  |
| Propane (CAS 74-98-6)   | PEL     | 1800 mg/m3 | 1000 ppm |
| US. OSHA Table Z-2 (29 CFR 1910.1000)                             |         |            |          |
| Components  | Type    | Value      |          |
| Toluene (CAS 108-88-3)  | Ceiling | 300 ppm    |          |
|   | TWA     | 200 ppm    |          |
| US. ACGIH Threshold Limit Values                                  |         |            |          |
| Components  | Type    | Value      | Form     |
| Acetone (CAS 67-64-1)   | STEL    | 500 ppm    |          |
|   | TWA     | 250 ppm    |          |

US. ACGIH Threshold Limit Values

| Components                 | Type | Value     | Form                |
|----------------------------|------|-----------|---------------------|
| Asphalt (CAS 8052-42-4)    | TWA  | 0.5 mg/m3 | Inhalable fraction. |
| Butane (CAS 106-97-8)      | STEL | 1000 ppm  |                     |
| Cyclohexane (CAS 110-82-7) | TWA  | 100 ppm   |                     |
| n-Heptane (CAS 142-82-5)   | STEL | 500 ppm   |                     |
|                            | TWA  | 400 ppm   |                     |
| n-Hexane (CAS 110-54-3)    | TWA  | 50 ppm    |                     |
| Toluene (CAS 108-88-3)     | TWA  | 20 ppm    |                     |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components                 | Type    | Value                  | Form  |
|----------------------------|---------|------------------------|-------|
| Acetone (CAS 67-64-1)      | TWA     | 590 mg/m3<br>250 ppm   | Fume. |
| Asphalt (CAS 8052-42-4)    | Ceiling | 5 mg/m3                |       |
| Butane (CAS 106-97-8)      | TWA     | 1900 mg/m3<br>800 ppm  |       |
| Cyclohexane (CAS 110-82-7) | TWA     | 1050 mg/m3             |       |
|                            |         | 300 ppm                |       |
| n-Heptane (CAS 142-82-5)   | Ceiling | 1800 mg/m3<br>440 ppm  |       |
|                            | TWA     | 350 mg/m3<br>85 ppm    |       |
| n-Hexane (CAS 110-54-3)    | TWA     | 180 mg/m3<br>50 ppm    |       |
| Propane (CAS 74-98-6)      | TWA     | 1800 mg/m3<br>1000 ppm |       |
| Toluene (CAS 108-88-3)     | STEL    | 560 mg/m3<br>150 ppm   |       |
|                            | TWA     | 375 mg/m3<br>100 ppm   |       |

Biological limit values

ACGIH Biological Exposure Indices

| Components              | Value     | Determinant                         | Specimen            | Sampling Time |
|-------------------------|-----------|-------------------------------------|---------------------|---------------|
| Acetone (CAS 67-64-1)   | 25 mg/l   | Acetone                             | Urine               | *             |
| n-Hexane (CAS 110-54-3) | 0.4 mg/l  | 2,5-Hexanedio n, without hydrolysis | Urine               | *             |
| Toluene (CAS 108-88-3)  | 0.3 mg/g  | o-Cresol, with hydrolysis           | Creatinine in urine | *             |
|                         | 0.03 mg/l | Toluene                             | Urine               | *             |
|                         | 0.02 mg/l | Toluene                             | Blood               | *             |

\* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

|                         |                                   |
|-------------------------|-----------------------------------|
| n-Hexane (CAS 110-54-3) | Can be absorbed through the skin. |
| Toluene (CAS 108-88-3)  | Can be absorbed through the skin. |

US - Minnesota Haz Subs: Skin designation applies

|                        |                           |
|------------------------|---------------------------|
| Toluene (CAS 108-88-3) | Skin designation applies. |
|------------------------|---------------------------|

US ACGIH Threshold Limit Values: Skin designation

|                         |                                   |
|-------------------------|-----------------------------------|
| n-Hexane (CAS 110-54-3) | Can be absorbed through the skin. |
|-------------------------|-----------------------------------|

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

|                                |   |
|--------------------------------|---|
| Eye/face protection            | Wear safety glasses with side shields (or goggles).   |
| Skin protection                |   |
| Hand protection                | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.   |
| Other                          | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.  |
| Respiratory protection         | If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.   |
| Thermal hazards                | Wear appropriate thermal protective clothing, when necessary.   |
| General hygiene considerations | Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. Physical and chemical properties

Appearance

|   |  |
|---|--|
| Physical state                          | Gas.                                       |
| Form                                    | Aerosol.                                   |
| Color                                   | Not available.                             |
| Odor                                    | Not available.                             |
| Odor threshold                          | Not available.                             |
| pH                                      | Not available.                             |
| Melting point/freezing point            | Not available.                             |
| Initial boiling point and boiling range | 520.62 °F (271.46 °C) estimated            |
| Flash point                             | -156.0 °F (-104.4 °C) PROPELLANT estimated |
| Evaporation rate                        | Not available.                             |
| Flammability (solid, gas)               | Not available.                             |

Upper/lower flammability or explosive limits

|   |                        |
|---|------------------------|
| Flammability limit - lower (%)          | 1.3 % estimated        |
| Flammability limit - upper (%)          | 9.6 % estimated        |
| Explosive limit - lower (%)             | Not available.         |
| Explosive limit - upper (%)             | Not available.         |
| Vapor pressure                          | 30 psig @70F estimated |
| Vapor density                           | Not available.         |
| Relative density                        | Not available.         |
| Solubility(ies)                         |                        |
| Solubility (water)                      | Not available.         |
| Partition coefficient (n-octanol/water) | Not available.         |
| Auto-ignition temperature               | Not available.         |
| Decomposition temperature               | Not available.         |
| Viscosity                               | Not available.         |

Other information

|                               |                     |
|-------------------------------|---------------------|
| Explosive properties          | Not explosive.      |
| Flame extension               | 20 in estimated     |
| Heat of combustion (NFPA 30B) | 33.2 kJ/g estimated |
| Oxidizing properties          | Not oxidizing.      |
| Specific gravity              | 0.807 estimated     |

VOC (Weight %)24.5 % estimated

10. Stability and reactivity

|                                    |   |
|------------------------------------|---|
| Reactivity                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability                 | Material is stable under normal conditions.   |
| Possibility of hazardous reactions | Hazardous polymerization does not occur.  |
| Conditions to avoid                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| Incompatible materials             | Acids. Strong oxidizing agents.   |
| Hazardous decomposition products   | No hazardous decomposition products are known.  |

11. Toxicological information

Information on likely routes of exposure

|  |  |
|--|--|
| Inhalation   | Harmful if inhaled.  |
| Skin contact   | Causes skin irritation.  |
| Eye contact  | Direct contact with eyes may cause temporary irritation.   |
| Ingestion  | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |
| Symptoms related to the physical, chemical and toxicological characteristics | Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain.                     |

Information on toxicological effects

Acute toxicityMay be fatal if swallowed and enters airways. Harmful if inhaled.

| Components                         | Species    | Test Results           |
|------------------------------------|------------|------------------------|
| Acetone (CAS 67-64-1)              |            |                        |
| <u>Acute</u><br>Dermal<br>LD50     | Guinea pig | > 7426 mg/kg, 24 Hours |
|                                    |            | > 9.4 ml/kg, 24 Hours  |
|                                    | Rabbit     | > 7426 mg/kg, 24 Hours |
|                                    |            | > 9.4 ml/kg, 24 Hours  |
| Inhalation<br>LC50                 | Rat        | 55700 ppm, 3 Hours     |
|                                    |            | 132 mg/l, 3 Hours      |
|                                    |            | 50.1 mg/l              |
| Oral<br>LD50                       | Rat        | 5800 mg/kg             |
|                                    |            | 2.2 ml/kg              |
| Asphalt (CAS 8052-42-4)            |            |                        |
| <u>Acute</u><br>Dermal<br>LD50     | Rabbit     | > 2000 mg/kg, 24 Hours |
|                                    |            |                        |
| Inhalation<br>LC50                 | Rat        | > 94.4 mg/m3           |
| Butane (CAS 106-97-8)              |            |                        |
| <u>Acute</u><br>Inhalation<br>LC50 | Mouse      | 1237 mg/l, 120 Minutes |
|                                    |            | 52 %, 120 Minutes      |
|                                    | Rat        | 1355 mg/l              |

| Components   | Species    | Test Results   |
|--|------------|--|
| Cyclohexane (CAS 110-82-7)                                   |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg   |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 32880 mg/m3, 4 Hours<br>> 5540 ppm, 4 Hours              |
| <b>Oral</b>  |            |  |
| LD50   | Rabbit     | > 5000 mg/kg   |
|  | Rat        | > 5000 mg/kg   |
| Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8) |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg<br>> 2000 mg/kg, 24 Hours                     |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 7.5 mg/l, 6 Hours<br>> 4.6 mg/l, 4 Hours                 |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | > 5000 mg/kg   |
| n-Heptane (CAS 142-82-5)                                     |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg, 24 Hours                                     |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 29.29 mg/l, 4 Hours                                      |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | > 5000 mg/kg   |
| n-Hexane (CAS 110-54-3)                                      |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Dermal</b>  |            |  |
| LD50   | Rabbit     | > 2000 mg/kg, 4 Hours<br>> 5 ml/kg, 4 Hours                |
| <b>Inhalation</b>  |            |  |
| LC50   | Rat        | > 5000 ppm, 24 Hours<br>> 31.86 mg/l<br>73860 ppm, 4 Hours |
| <b>Oral</b>  |            |  |
| LD50   | Rat        | 24 ml/kg<br>24 g/kg  |
|  | Wistar rat | 49 g/kg  |
| Propane (CAS 74-98-6)  |            |  |
| <b><u>Acute</u></b>  |            |  |
| <b>Inhalation</b>  |            |  |
| LC50   | Mouse      | 1237 mg/l, 120 Minutes<br>52 %, 120 Minutes                |
|  | Rat        | 1355 mg/l<br>658 mg/l/4h                                   |

| Components             | Species | Test Results             |
|------------------------|---------|--------------------------|
| Toluene (CAS 108-88-3) |         |                          |
| <u>Acute</u>           |         |                          |
| <b>Dermal</b>          |         |                          |
| LD50                   | Rabbit  | > 5000 mg/kg, 24 Hours   |
| <b>Inhalation</b>      |         |                          |
| LC50                   | Mouse   | 6405 - 7436 ppm, 6 Hours |
|                        |         | 5320 ppm, 8 Hours        |
|                        | Rat     | 5879 - 6281 ppm, 6 Hours |
|                        |         | 25.7 mg/l, 4 Hours       |
| <b>Oral</b>            |         |                          |
| LD50                   | Rat     | > 5000 mg/kg             |

\* Estimates for product may be based on additional component data not shown.

|   |  |
|---|--|
| <b>Skin corrosion/irritation</b>                                      | Causes skin irritation.  |
| <b>Serious eye damage/eye irritation</b>                              | Direct contact with eyes may cause temporary irritation.   |
| <b>Respiratory or skin sensitization</b>                              |  |
| <b>Respiratory sensitization</b>                                      | Not a respiratory sensitizer.  |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.  |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| <b>Carcinogenicity</b>  | Risk of cancer cannot be excluded with prolonged exposure.   |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |  |
| Asphalt (CAS 8052-42-4)   | 2B Possibly carcinogenic to humans.  |
| Toluene (CAS 108-88-3)  | 3 Not classifiable as to carcinogenicity to humans.  |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |  |
| Not regulated.  |  |
| <b>US. National Toxicology Program (NTP) Report on Carcinogens</b>    |  |
| Not listed.   |  |
| <b>Reproductive toxicity</b>  | Suspected of damaging fertility. Suspected of damaging the unborn child.   |
| <b>Specific target organ toxicity - single exposure</b>               | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b>             | Not classified.  |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways.  |
| <b>Chronic effects</b>  | Prolonged exposure may cause chronic effects.  |

12. Ecological information

| Ecotoxicity  |      | Toxic to aquatic life with long lasting effects.    |                              |
|--|------|---|------------------------------|
| Components   |      | Species   | Test Results                 |
| Acetone (CAS 67-64-1)  |      |   |                              |
| Aquatic  |      |   |                              |
| Crustacea  | EC50 | Water flea (Daphnia magna)                          | 21.6 - 23.9 mg/l, 48 hours   |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours   |
| Cyclohexane (CAS 110-82-7)                                   |      |   |                              |
| Aquatic  |      |   |                              |
| Fish   | LC50 | Fathead minnow (Pimephales promelas)                | 23.03 - 42.07 mg/l, 96 hours |
| Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8) |      |   |                              |
| Aquatic  |      |   |                              |
| Fish   | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.9 mg/l, 96 hours           |

| Components               |      | Species  | Test Results                 |
|--------------------------|------|--|------------------------------|
| n-Heptane (CAS 142-82-5) |      |  |                              |
| Aquatic                  |      |  |                              |
| Fish                     | LC50 | Mozambique tilapia (Tilapia mossambica)          | 375 mg/l, 96 hours           |
| n-Hexane (CAS 110-54-3)  |      |  |                              |
| Aquatic                  |      |  |                              |
| Fish                     | LC50 | Fathead minnow (Pimephales promelas)             | 2.101 - 2.981 mg/l, 96 hours |
| Toluene (CAS 108-88-3)   |      |  |                              |
| Aquatic                  |      |  |                              |
| Algae                    | IC50 | Algae  | 433.0001 mg/L, 72 Hours      |
| Crustacea                | EC50 | Daphnia  | 7.645 mg/L, 48 Hours         |
|                          |      | Water flea (Daphnia magna)                       | 5.46 - 9.83 mg/l, 48 hours   |
| Fish                     | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch) | 8.11 mg/l, 96 hours          |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

|             |       |
|-------------|-------|
| Acetone     | -0.24 |
| Butane      | 2.89  |
| Cyclohexane | 3.44  |
| n-Heptane   | 4.66  |
| n-Hexane    | 3.9   |
| Propane     | 2.36  |
| Toluene     | 2.73  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.  |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.  |

14. Transport information

|                              |   |
|------------------------------|---|
| DOT                          |   |
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable, (each not exceeding 1 L capacity)  |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |

|                      |      |
|----------------------|------|
| Special provisions   | N82  |
| Packaging exceptions | 306  |
| Packaging non bulk   | None |
| Packaging bulk       | None |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | Aerosols, flammable   |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Environmental hazards        | Yes   |
| ERG Code                     | 10L   |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Other information            |   |
| Passenger and cargo aircraft | Allowed with restrictions.  |
| Cargo aircraft only          | Allowed with restrictions.  |
| Packaging Exceptions         | LTD QTY   |

IMDG

|                              |   |
|------------------------------|---|
| UN number                    | UN1950  |
| UN proper shipping name      | AEROSOLS  |
| Transport hazard class(es)   |   |
| Class                        | 2.1   |
| Subsidiary risk              | -   |
| Label(s)                     | 2.1   |
| Packing group                | Not applicable.   |
| Environmental hazards        |   |
| Marine pollutant             | Yes   |
| EmS                          | F-D, S-U  |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Packaging Exceptions         | LTD QTY   |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

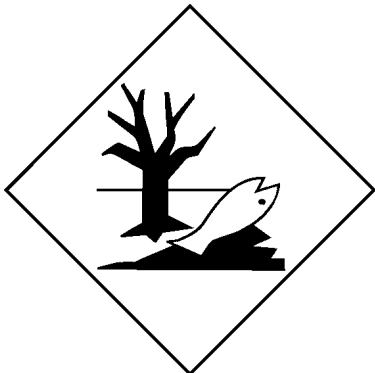
DOT



IATA; IMDG



Marine pollutant



General information

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

|                            |         |
|----------------------------|---------|
| Acetone (CAS 67-64-1)      | Listed. |
| Cyclohexane (CAS 110-82-7) | Listed. |
| n-Hexane (CAS 110-54-3)    | Listed. |
| Toluene (CAS 108-88-3)     | Listed. |

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|---------------|------------|----------|
| Cyclohexane   | 110-82-7   | 1 - 2.5  |
| n-Hexane      | 110-54-3   | 0.1 - 1  |
| Toluene       | 108-88-3   | 0.1 - 1  |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

n-Hexane (CAS 110-54-3)  
Toluene (CAS 108-88-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (CAS 106-97-8)  
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)            Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

|                        |      |
|------------------------|------|
| Acetone (CAS 67-64-1)  | 6532 |
| Toluene (CAS 108-88-3) | 6594 |

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

|                        |        |
|------------------------|--------|
| Acetone (CAS 67-64-1)  | 35 %WV |
| Toluene (CAS 108-88-3) | 35 %WV |

DEA Exempt Chemical Mixtures Code Number

|                        |      |
|------------------------|------|
| Acetone (CAS 67-64-1)  | 6532 |
| Toluene (CAS 108-88-3) | 594  |

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Acetone (CAS 67-64-1)  
Asphalt (CAS 8052-42-4)  
Butane (CAS 106-97-8)  
n-Hexane (CAS 110-54-3)  
Toluene (CAS 108-88-3)

US. Massachusetts RTK - Substance List

Acetone (CAS 67-64-1)  
Asphalt (CAS 8052-42-4)  
Butane (CAS 106-97-8)  
Cyclohexane (CAS 110-82-7)  
n-Heptane (CAS 142-82-5)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

Acetone (CAS 67-64-1)  
Asphalt (CAS 8052-42-4)  
Butane (CAS 106-97-8)  
Cyclohexane (CAS 110-82-7)  
n-Heptane (CAS 142-82-5)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

Acetone (CAS 67-64-1)  
Asphalt (CAS 8052-42-4)  
Butane (CAS 106-97-8)  
Cyclohexane (CAS 110-82-7)  
n-Heptane (CAS 142-82-5)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

US. Rhode Island RTK

Acetone (CAS 67-64-1)  
Butane (CAS 106-97-8)  
Cyclohexane (CAS 110-82-7)  
n-Hexane (CAS 110-54-3)  
Propane (CAS 74-98-6)  
Toluene (CAS 108-88-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

|                        |                         |
|------------------------|-------------------------|
| Toluene (CAS 108-88-3) | Listed: January 1, 1991 |
|------------------------|-------------------------|

International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

|                      |   |
|----------------------|---|
| Issue date           | 06-17-2016  |
| Revision date        | 09-29-2016  |
| Version #            | 02  |
| Disclaimer           | We cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety.   |

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000036041  
**Product identifier** 11.5 OZ MACS DEICER 7000 LT 12PK  
**Company information** NAPA BALKAMP  
2601 Stout Heritage Parkway  
Plainfield, IN 46168 United States  
**Company phone** General Assistance 1-317-754-3900  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** Not available.  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Serious eye damage/eye irritation Category 2  
Specific target organ toxicity, single exposure Category 3 narcotic effects  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol. Causes serious eye irritation. May cause drowsiness or dizziness.  
**Precautionary statement**  
**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.  
**Response** If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.  
**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %        |
|--|--------------------------|------------|----------|
| Isopropyl Alcohol                        |                          | 67-63-0    | 40 - 60  |
| Carbon Dioxide                           |                          | 124-38-9   | 2.5 - 10 |
| Ethylene Glycol                          |                          | 107-21-1   | 2.5 - 10 |
| Other components below reportable levels |                          |            | 20 - 40  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.   |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Ingestion</b>  | In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.                              |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Alcohol resistant foam. Powder. Carbon dioxide (CO <sub>2</sub> ).   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.  |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.   |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol.   |

## 6. Accidental release measures

|  |   |
|--|---|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| <b>Methods and materials for containment and cleaning up</b>               | Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.  |

## 7. Handling and storage

|                                      |  |
|--------------------------------------|--|
| <b>Precautions for safe handling</b> | Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|--------------------------------------|--|

**Conditions for safe storage, including any incompatibilities**

Level 1 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                      | Type | Value                            |
|---------------------------------|------|----------------------------------|
| Carbon Dioxide (CAS 124-38-9)   | PEL  | 9000 mg/m3                       |
| Isopropyl Alcohol (CAS 67-63-0) | PEL  | 5000 ppm<br>980 mg/m3<br>400 ppm |

**US. ACGIH Threshold Limit Values**

| Components                      | Type           | Value                 | Form     |
|---------------------------------|----------------|-----------------------|----------|
| Carbon Dioxide (CAS 124-38-9)   | STEL           | 30000 ppm             |          |
| Ethylene Glycol (CAS 107-21-1)  | TWA<br>Ceiling | 5000 ppm<br>100 mg/m3 | Aerosol. |
| Isopropyl Alcohol (CAS 67-63-0) | STEL<br>TWA    | 400 ppm<br>200 ppm    |          |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                      | Type        | Value   |
|---------------------------------|-------------|---|
| Carbon Dioxide (CAS 124-38-9)   | STEL        | 54000 mg/m3                                   |
|                                 | TWA         | 30000 ppm<br>9000 mg/m3<br>5000 ppm           |
| Isopropyl Alcohol (CAS 67-63-0) | STEL<br>TWA | 1225 mg/m3<br>500 ppm<br>980 mg/m3<br>400 ppm |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components                      | Value   | Determinant | Specimen | Sampling Time |
|---------------------------------|---------|-------------|----------|---------------|
| Isopropyl Alcohol (CAS 67-63-0) | 40 mg/l | Acetone     | Urine    | *             |

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear suitable protective clothing.

**Respiratory protection**

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

|                                       |  |
|---------------------------------------|--|
| <b>Thermal hazards</b>                | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b> | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## 9. Physical and chemical properties

### Appearance

|  |                             |
|--|-----------------------------|
| <b>Physical state</b>                          | Gas.                        |
| <b>Form</b>                                    | Aerosol.                    |
| <b>Color</b>                                   | Not available.              |
| <b>Odor</b>                                    | Not available.              |
| <b>Odor threshold</b>                          | Not available.              |
| <b>pH</b>                                      | Not available.              |
| <b>Melting point/freezing point</b>            | Not available.              |
| <b>Initial boiling point and boiling range</b> | 212 °F (100 °C) estimated   |
| <b>Flash point</b>                             | 63.6 °F (17.6 °C) estimated |
| <b>Evaporation rate</b>                        | Not available.              |
| <b>Flammability (solid, gas)</b>               | Not available.              |

### Upper/lower flammability or explosive limits

|  |                               |
|--|-------------------------------|
| <b>Flammability limit - lower (%)</b>          | 2.5 % estimated               |
| <b>Flammability limit - upper (%)</b>          | 12 % estimated                |
| <b>Explosive limit - lower (%)</b>             | Not available.                |
| <b>Explosive limit - upper (%)</b>             | Not available.                |
| <b>Vapor pressure</b>                          | 110 - 130 psig @20C estimated |
| <b>Vapor density</b>                           | Not available.                |
| <b>Relative density</b>                        | 15.859 estimated              |
| <b>Solubility(ies)</b>                         |                               |
| <b>Solubility (water)</b>                      | Not available.                |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.                |
| <b>Auto-ignition temperature</b>               | 797 °F (425 °C) estimated     |
| <b>Decomposition temperature</b>               | Not available.                |
| <b>Viscosity</b>                               | Not available.                |

### Other information

|                                      |                      |
|--------------------------------------|----------------------|
| <b>Explosive properties</b>          | Not explosive.       |
| <b>Heat of combustion (NFPA 30B)</b> | 15.83 kJ/g estimated |
| <b>Oxidizing properties</b>          | Not oxidizing.       |
| <b>Specific gravity</b>              | 0.897 estimated      |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.  |
| <b>Conditions to avoid</b>                | Avoid temperatures exceeding the flash point. Contact with incompatible materials.            |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Isocyanates. Chlorine.   |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful. |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.   |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.   |

**Symptoms related to the physical, chemical and toxicological characteristics** May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on toxicological effects

**Acute toxicity** Narcotic effects.

| Components                      | Species | Test Results         |
|---------------------------------|---------|----------------------|
| Ethylene Glycol (CAS 107-21-1)  |         |                      |
| <b>Acute</b>                    |         |                      |
| <b>Dermal</b>                   |         |                      |
| LD50                            | Mouse   | > 3500 mg/kg         |
| <b>Inhalation</b>               |         |                      |
| LC50                            | Rat     | > 2.5 mg/l, 6 Hours  |
| <b>Oral</b>                     |         |                      |
| LD50                            | Rat     | 7712 mg/kg           |
| Isopropyl Alcohol (CAS 67-63-0) |         |                      |
| <b>Acute</b>                    |         |                      |
| <b>Dermal</b>                   |         |                      |
| LD50                            | Rabbit  | 16.4 ml/kg, 24 Hours |
| <b>Inhalation</b>               |         |                      |
| LC50                            | Rat     | > 10000 ppm, 6 Hours |
| <b>Oral</b>                     |         |                      |
| LD50                            | Rat     | 5.84 g/kg            |

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components                      | Species | Test Results   |
|---------------------------------|---------|--|
| Ethylene Glycol (CAS 107-21-1)  |         |  |
| <b>Aquatic</b>                  |         |  |
| Crustacea                       | EC50    | Daphnia 46300 mg/L, 48 Hours                             |
| Fish                            | LC50    | Fathead minnow (Pimephales promelas) 8050 mg/l, 96 hours |
| Isopropyl Alcohol (CAS 67-63-0) |         |  |
| <b>Aquatic</b>                  |         |  |
| Algae                           | IC50    | Algae 1000.0001 mg/L, 72 Hours                           |
| Crustacea                       | EC50    | Daphnia 13299 mg/L, 48 Hours                             |
| Fish                            | LC50    | Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours     |

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

|                   |       |
|-------------------|-------|
| Ethylene Glycol   | -1.36 |
| Isopropyl Alcohol | 0.05  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1993  |
| <b>UN proper shipping name</b>      | Flammable liquids, n.o.s. (Isopropyl Alcohol)                           |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 3   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 3   |
| <b>Packing group</b>                | II  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | IB2, T7, TP1, TP8, TP28   |
| <b>Packaging exceptions</b>         | 150   |
| <b>Packaging non bulk</b>           | 202   |
| <b>Packaging bulk</b>               | 242   |

### IATA

|                                |  |
|--------------------------------|--|
| <b>UN number</b>               | UN1993                                       |
| <b>UN proper shipping name</b> | Flammable liquid, n.o.s. (Isopropyl Alcohol) |

**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** II**Environmental hazards** No.**ERG Code** 3H**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.**Other information****Passenger and cargo aircraft** Allowed with restrictions.**Cargo aircraft only** Allowed with restrictions.**IMDG****UN number** UN1993**UN proper shipping name** FLAMMABLE LIQUID, N.O.S. (Isopropyl Alcohol)**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** II**Environmental hazards****Marine pollutant** No**EmS** F-E, S-E**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.**DOT****IATA; IMDG****General information**

IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Ethylene Glycol (CAS 107-21-1)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

| Chemical name   | CAS number | % by wt. |
|-----------------|------------|----------|
| Ethylene Glycol | 107-21-1   | 2.5 - 10 |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Ethylene Glycol (CAS 107-21-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Massachusetts RTK - Substance List**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Carbon Dioxide (CAS 124-38-9)

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. Rhode Island RTK**

Ethylene Glycol (CAS 107-21-1)

Isopropyl Alcohol (CAS 67-63-0)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Ethylene Glycol (CAS 107-21-1)

Listed: June 19, 2015

**International Inventories**

| Country(s) or region | Inventory name   | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia            | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada               | Domestic Substances List (DSL)   | Yes                    |
| Canada               | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe               | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |

| Country(s) or region        | Inventory name  | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Europe                      | European List of Notified Chemical Substances (ELINCS)            | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)          | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                     | Yes                    |
| New Zealand                 | New Zealand Inventory   | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                     | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-26-2018

**Version #** 01

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixture  
Trade name : MASTER 25% STARTING FLUID 11 OZ.  
Product code : SF-16

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Starting Fluid

### 1.3. Details of the supplier of the safety data sheet

Master Chemical  
4635 Willow Drive  
Medina, MN 55340 - USA  
T: 612-478-2360

### 1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification (GHS-US)

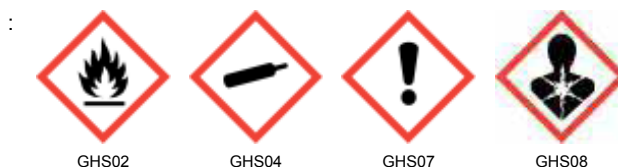
Flam. Aerosol 1 H222  
Compressed gas H280  
Skin Irrit. 2 H315  
Muta. 1B H340  
Carc. 1A H350  
Repr. 2 H361  
STOT SE 3 H336  
STOT RE 2 H373

Full text of H-phrases: see section 16

### 2.2. Label elements

#### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H222 - Extremely flammable aerosol  
H280 - Contains gas under pressure; may explode if heated  
H315 - Causes skin irritation  
H336 - May cause drowsiness or dizziness  
H340 - May cause genetic defects  
H350 - May cause cancer  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US)

: P201 - Obtain special instructions  
P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking  
P211 - Do not spray on an open flame or other ignition source  
P251 - Pressurized container: Do not pierce or burn, even after use  
P260 - Do not breathe dust, fumes, gas, mist, vapor, spray  
P261 - Avoid breathing dust, fume, gas, mist, vapor, spray  
P264 - Wash affected areas thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves, protective clothing, eye protection, face protection  
P302+P352 - If on skin: Wash with plenty of soap and water  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.  
P314 - Get medical advice/attention if you feel unwell  
P321 - Specific treatment: See section 4.1 on this label  
P332+P313 - If skin irritation occurs: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P405 - Store locked up  
P410+P403 - Protect from sunlight. Store in a well-ventilated place  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

### 2.3. Other hazards

Other hazards not contributing to the classification : Contains gas under pressure; may explode if heated.

### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name   | Product identifier   | %               | Classification (GHS-US)   |
|--|----------------------|-----------------|---|
| Heptane, branched cyclic                               | (CAS No) 426260-76-6 | 44.64 - 46.5    | Flam. Liq. 1, H224<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 3, H412                          |
| diethyl ether  | (CAS No) 60-29-7     | 10 - 30         | Flam. Liq. 1, H224<br>Acute Tox. 4 (Oral), H302   |
| Petroleum gases, liquefied, sweetened                  | (CAS No) 68476-86-8  | 10 - 30         | Flam. Gas 1, H220<br>Flam. Liq. 1, H224<br>Muta. 1B, H340<br>Carc. 1A, H350   |
| heptane  | (CAS No) 142-82-5    | 11.625 - 20.925 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |
| carbon dioxide, liquefied, under pressure              | (CAS No) 124-38-9    | 5 - 10          | Compressed gas, H280  |
| Toluene  | (CAS No) 108-88-3    | 0.465 - 1.86    | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>Repr. 2, H361<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304                 |
| distillates (petroleum), hydrotreated heavy naphthenic | (CAS No) 64742-52-5  | < 1             | Not classified  |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Cough. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment: See section 4.1 on this label.

First-aid measures after eye contact : Direct contact with the eyes is likely to be irritating. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation : Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable liquid and vapor. Extremely flammable aerosol.
- Explosion hazard : May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Aerosol level 3.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Safety glasses.
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust,fume,gas,mist,vapor spray.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- For containment : Dam up the liquid spill.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.
- Precautions for safe handling : No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust,fume,gas,mist,vapor spray. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash affected areas thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment  
. Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: ignition sources. heat sources.
- Storage area : Store in a well-ventilated place.

### 7.3. Specific end use(s)

Follow Label Directions.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| diethyl ether (60-29-7) |                   |      |
|-------------------------|-------------------|------|
| USA ACGIH               | ACGIH TWA (mg/m³) | 1200 |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| diethyl ether (60-29-7) |                                     |                        |
|-------------------------|-------------------------------------|------------------------|
| USA ACGIH               | ACGIH TWA (ppm)                     | 400 ppm                |
| USA ACGIH               | ACGIH STEL (mg/m <sup>3</sup> )     | 1500 mg/m <sup>3</sup> |
| USA ACGIH               | ACGIH STEL (ppm)                    | 500 ppm                |
| USA OSHA                | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1200 mg/m <sup>3</sup> |
| USA OSHA                | OSHA PEL (TWA) (ppm)                | 400 ppm                |

| Toluene (108-88-3) |                                 |                      |
|--------------------|---------------------------------|----------------------|
| USA ACGIH          | ACGIH TWA (mg/m <sup>3</sup> )  | 37 mg/m <sup>3</sup> |
| USA ACGIH          | ACGIH TWA (ppm)                 | 10 ppm               |
| USA ACGIH          | ACGIH STEL (mg/m <sup>3</sup> ) | 560                  |
| USA ACGIH          | ACGIH STEL (ppm)                | 150 ppm              |
| USA ACGIH          | ACGIH Ceiling (ppm)             | 500 ppm              |
| USA OSHA           | OSHA PEL (TWA) (ppm)            | 200 ppm              |
| USA OSHA           | OSHA PEL (Ceiling) (ppm)        | 300 ppm              |

| heptane (142-82-5) |                  |         |
|--------------------|------------------|---------|
| USA ACGIH          | ACGIH TWA (ppm)  | 400 ppm |
| USA ACGIH          | ACGIH STEL (ppm) | 400 ppm |

| Heptane, branched cyclic (426260-76-6) |                      |         |
|--|----------------------|---------|
| USA ACGIH                              | ACGIH TWA (ppm)      | 400 ppm |
| USA ACGIH                              | ACGIH STEL (ppm)     | 500 ppm |
| USA OSHA                               | OSHA PEL (TWA) (ppm) | 500 ppm |

| Petroleum gases, liquefied, sweetened (68476-86-8) |                                     |  |
|--|-------------------------------------|--|
| USA ACGIH  | ACGIH TWA (ppm)                     | 1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4 |
| USA OSHA   | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 1800 mg/m <sup>3</sup>   |
| USA OSHA   | OSHA PEL (TWA) (ppm)                | 1000 ppm   |

| carbon dioxide, liquefied, under pressure (124-38-9) |                                     |                        |
|--|-------------------------------------|------------------------|
| USA ACGIH  | ACGIH TWA (mg/m <sup>3</sup> )      | 9000 mg/m <sup>3</sup> |
| USA ACGIH  | ACGIH TWA (ppm)                     | 5000 ppm               |
| USA ACGIH  | ACGIH STEL (mg/m <sup>3</sup> )     | 54000                  |
| USA ACGIH  | ACGIH STEL (ppm)                    | 30000 ppm              |
| USA OSHA   | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 9000 mg/m <sup>3</sup> |
| USA OSHA   | OSHA PEL (TWA) (ppm)                | 5000 ppm               |

### 8.2. Exposure controls

Appropriate engineering controls

: Local exhaust ventilation, vent hoods.

Personal protective equipment

: Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection

: Wear protective gloves.

Eye protection

: Chemical goggles or safety glasses.

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information

: Do not eat, drink or smoke during use.

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|   |   |
|---|---|
| Physical state                              | : Gas   |
| Appearance                                  | : Colorless to pale yellow liquid.                          |
| Color                                       | : Colourless to light yellow.                               |
| Odor  | : Sweet.  |
| Odor threshold                              | : No data available   |
| pH  | : No data available   |
| Relative evaporation rate (butyl acetate=1) | : No data available   |
| Melting point                               | : No data available   |
| Freezing point                              | : No data available   |
| Boiling point                               | : -42 °C (LOWEST COMPONENT)                                 |
| Flash point                                 | : < -23 °C  |
| Auto-ignition temperature                   | : 180 °C (LOWEST COMPONENT)                                 |
| Decomposition temperature                   | : No data available   |
| Flammability (solid, gas)                   | : No data available   |
| Vapor pressure                              | : No data available   |
| Relative vapor density at 20 °C             | : > 1.5   |
| Relative density                            | : No data available   |
| Solubility                                  | : Poorly soluble in water.                                  |
| Log Pow                                     | : No data available   |
| Log Kow                                     | : No data available   |
| Viscosity, kinematic                        | : No data available   |
| Viscosity, dynamic                          | : No data available   |
| Explosive properties                        | : Heating may cause an explosion. Heating may cause a fire. |
| Oxidizing properties                        | : No data available   |
| Explosive limits                            | : No data available   |

#### 9.2. Other information

|             |                          |
|-------------|--------------------------|
| VOC content | : 93.3 % CARB METHOD 310 |
|-------------|--------------------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Extremely flammable liquid and vapor. May form flammable/explosive vapor-air mixture. Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

May release flammable gases. Toxic fume. . Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

|                |                  |
|----------------|------------------|
| Acute toxicity | : Not classified |
|----------------|------------------|

| diethyl ether (60-29-7)    |   |
|----------------------------|---|
| LD50 oral rat              | 1215 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1600 mg/kg bodyweight; Rat) |
| LD50 dermal rabbit         | > 14200 mg/kg (Rabbit)  |
| LC50 inhalation rat (mg/l) | 99 mg/l/4h (Rat)  |
| LC50 inhalation rat (ppm)  | 32000 ppm/4h (Rat)  |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| <b>Toluene (108-88-3)</b>  |  |
|----------------------------|--|
| LD50 oral rat              | 5580 mg/kg body weight   |
| LD50 dermal rabbit         | > 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87) |
| LC50 inhalation rat (mg/l) | > 28.1 mg/l/4h (Rat; Air, Literature study)  |

| <b>heptane (142-82-5)</b>  |   |
|----------------------------|---|
| LD50 oral rat              | > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)      |
| LD50 dermal rabbit         | > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) |
| LC50 inhalation rat (mg/l) | 103 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)  | 25000 ppm/4h (Rat; Literature study)  |

| <b>Heptane, branched cyclic (426260-76-6)</b> |   |
|---|---|
| LD50 oral rat                                 | > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)      |
| LD50 dermal rabbit                            | > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across) |
| LC50 inhalation rat (mg/l)                    | 103 mg/l/4h (Rat; Literature study)   |
| LC50 inhalation rat (ppm)                     | 25000 ppm/4h (Rat; Literature study)  |

|                                   |  |
|-----------------------------------|--|
| Skin corrosion/irritation         | : Causes skin irritation.  |
| Serious eye damage/irritation     | : Not classified   |
| Respiratory or skin sensitization | : Not classified   |
| Germ cell mutagenicity            | : May cause genetic defects.Based on available data, the classification criteria are not met |
| Carcinogenicity                   | : May cause cancer.  |

| <b>Toluene (108-88-3)</b> |   |
|---------------------------|---|
| IARC group                | 3 |

| <b>distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)</b> |   |
|--|---|
| IARC group   | 3 |

|   |   |
|---|---|
| Reproductive toxicity                               | : Suspected of damaging fertility or the unborn child.Based on available data, the classification criteria are not met  |
| Specific target organ toxicity (single exposure)    | : May cause drowsiness or dizziness.  |
| Specific target organ toxicity (repeated exposure)  | : May cause damage to organs through prolonged or repeated exposure.Based on available data, the classification criteria are not met<br>May cause damage to organs through prolonged or repeated exposure |
| Aspiration hazard                                   | : Not classifiedBased on available data, the classification criteria are not met  |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met.   |
| Symptoms/injuries after inhalation                  | : Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.   |
| Symptoms/injuries after skin contact                | : Causes skin irritation.   |

## SECTION 12: Ecological information

### 12.1. Toxicity

| <b>diethyl ether (60-29-7)</b> |   |
|--------------------------------|---|
| LC50 fish 1                    | > 10000 ppm (96 h; Lepomis macrochirus) |
| EC50 Daphnia 1                 | 165 mg/l (24 h; Daphnia magna)          |
| LC50 fish 2                    | 2560 mg/l (96 h; Pimephales promelas)   |
| EC50 Daphnia 2                 | 1380 mg/l (48 h; Daphnia magna)         |
| TLM fish 1                     | > 1000 mg/l (96 h; Pisces)              |
| TLM other aquatic organisms 1  | > 1000 mg/l (96 h)                      |

| <b>Toluene (108-88-3)</b> |  |
|---------------------------|--|
| LC50 fish 1               | 24 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)        |
| EC50 Daphnia 1            | 84 mg/l (24 h; Daphnia magna; Locomotor effect)            |
| LC50 fish 2               | 13 mg/l (96 h; Lepomis macrochirus)                        |
| EC50 Daphnia 2            | 11.5 - 19.6 mg/l (48 h; Daphnia magna)                     |
| Threshold limit algae 1   | > 400 mg/l (168 h; Scenedesmus quadricauda; Toxicity test) |
| Threshold limit algae 2   | 105 mg/l (192 h; Microcystis aeruginosa)                   |

| <b>heptane (142-82-5)</b> |   |
|---------------------------|---|
| LC50 fish 1               | 375 mg/l (96 h; Tilapia mosambica; Nominal concentration) |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| heptane (142-82-5)                        |   |
|---|---|
| LC50 other aquatic organisms 1            | > 1000 mg/l (96 h)                                  |
| EC50 Daphnia 1                            | 1.5 mg/l (48 h; Daphnia magna)                      |
| LC50 fish 2                               | > 100 mg/l (96 h; Oncorhynchus kisutch)             |
| TLM fish 1                                | 4924 mg/l (48 h; Gambusia affinis)                  |
| Threshold limit other aquatic organisms 1 | > 1000 mg/l (96 h)                                  |
| Threshold limit algae 1                   | > 200 mg/l (Scenedesmus quadricauda; Toxicity test) |
| Threshold limit algae 2                   | 1.5 mg/l (8 h; Algae; Photosynthesis)               |

| carbon dioxide, liquefied, under pressure (124-38-9) |   |
|--|---|
| LC50 fish 1  | 35 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)       |
| LC50 fish 2  | 60 - 240 mg/l (12 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal) |

### 12.2. Persistence and degradability

| MASTER 25% STARTING FLUID 11 OZ. |                  |
|----------------------------------|------------------|
| Persistence and degradability    | Not established. |

| diethyl ether (60-29-7)         |  |
|---------------------------------|--|
| Persistence and degradability   | Not readily biodegradable in water. No (test)data on mobility of the substance available. Reacts with air. |
| Biochemical oxygen demand (BOD) | 0.03 g O <sub>2</sub> /g substance   |
| Chemical oxygen demand (COD)    | 0.026 g O <sub>2</sub> /g substance (KMnO <sub>4</sub> )   |
| ThOD                            | 2.60 g O <sub>2</sub> /g substance   |
| BOD (% of ThOD)                 | 0.012 % ThOD   |

| Toluene (108-88-3)              |  |
|---------------------------------|--|
| Persistence and degradability   | Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil. |
| Biochemical oxygen demand (BOD) | 2.15 g O <sub>2</sub> /g substance   |
| Chemical oxygen demand (COD)    | 2.52 g O <sub>2</sub> /g substance   |
| ThOD                            | 3.13 g O <sub>2</sub> /g substance   |
| BOD (% of ThOD)                 | 0.69 % ThOD  |

| heptane (142-82-5)              |   |
|---------------------------------|---|
| Persistence and degradability   | Readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil. |
| Biochemical oxygen demand (BOD) | 1.92 g O <sub>2</sub> /g substance  |
| Chemical oxygen demand (COD)    | 0.06 g O <sub>2</sub> /g substance  |
| ThOD                            | 3.52 g O <sub>2</sub> /g substance  |
| BOD (% of ThOD)                 | > % ThOD (5 day(s)) > 0.5   |

| Heptane, branched cyclic (426260-76-6) |   |
|--|---|
| Persistence and degradability          | May cause long-term adverse effects in the environment. |

| Petroleum gases, liquefied, sweetened (68476-86-8) |                  |
|--|------------------|
| Persistence and degradability                      | Not established. |

| carbon dioxide, liquefied, under pressure (124-38-9) |   |
|--|---|
| Persistence and degradability                        | Biodegradability: not applicable. No (test)data on mobility of the substance available. |
| Biochemical oxygen demand (BOD)                      | Not applicable  |
| Chemical oxygen demand (COD)                         | Not applicable  |
| ThOD   | Not applicable  |
| BOD (% of ThOD)                                      | Not applicable  |

### 12.3. Bioaccumulative potential

| MASTER 25% STARTING FLUID 11 OZ. |                  |
|----------------------------------|------------------|
| Bioaccumulative potential        | Not established. |

| diethyl ether (60-29-7)   |   |
|---------------------------|---|
| BCF fish 1                | 0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks) |
| Log Pow                   | 0.82 - 0.89 (Experimental value)                    |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500).      |

| Toluene (108-88-3)            |   |
|-------------------------------|---|
| BCF fish 1                    | 13.2 (Anguilla japonica)                |
| BCF fish 2                    | 90 (72 h; Leuciscus idus)               |
| BCF other aquatic organisms 1 | 380 (24 h; Chlorella sp.; Fresh weight) |
| BCF other aquatic organisms 2 | 4.2 (Mytilus edulis; Fresh weight)      |

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

|   |   |
|---|---|
| <b>Toluene (108-88-3)</b>                                   |   |
| Log Pow   | 2.73 (Experimental value; Other; 20 °C)                           |
| Bioaccumulative potential                                   | Low potential for bioaccumulation (BCF < 500).                    |
| <b>heptane (142-82-5)</b>                                   |   |
| BCF other aquatic organisms 1                               | 552   |
| Log Pow   | 4.66 (Experimental value; 4.5; Literature)                        |
| Bioaccumulative potential                                   | Potential for bioaccumulation ( $4 \geq \text{Log Kow} \leq 5$ ). |
| <b>Heptane, branched cyclic (426260-76-6)</b>               |   |
| Bioaccumulative potential                                   | Not established.  |
| <b>Petroleum gases, liquefied, sweetened (68476-86-8)</b>   |   |
| Bioaccumulative potential                                   | Not established.  |
| <b>carbon dioxide, liquefied, under pressure (124-38-9)</b> |   |
| Log Pow   | 0.83 (Experimental value)   |
| Bioaccumulative potential                                   | Low potential for bioaccumulation ( $\text{Log Kow} < 4$ ).       |

### 12.4. Mobility in soil

|                                |                   |
|--------------------------------|-------------------|
| <b>diethyl ether (60-29-7)</b> |                   |
| Surface tension                | 0.017 N/m (20 °C) |
| <b>Toluene (108-88-3)</b>      |                   |
| Surface tension                | 0.03 N/m (20 °C)  |
| <b>heptane (142-82-5)</b>      |                   |
| Surface tension                | 0.020 N/m (20 °C) |

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity

ICAO/IATA (air): UN1950, Aerosols, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

### 14.2. UN proper shipping name

DOT Proper Shipping Name : Aerosols  
flammable, n.o.s. (engine starting fluid) (each not exceeding 1 L capacity)

Department of Transportation (DOT) Hazard Classes : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : 304

DOT Packaging Bulk (49 CFR 173.xxx) : None

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 14.3. Additional information

Other information : No supplementary information available.

### Overland transport

No additional information available

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other : 48 - Stow "away from" sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : Forbidden  
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg  
CFR 175.75)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### MASTER 25% STARTING FLUID 11 OZ.

|                                     |  |
|-------------------------------------|--|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard<br>Immediate (acute) health hazard<br>Sudden release of pressure hazard |
|-------------------------------------|--|

#### diethyl ether (60-29-7)

|                                     |  |
|-------------------------------------|--|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard |
|-------------------------------------|--|

#### Toluene (108-88-3)

Listed on United States SARA Section 313  
Listed on the United States TSCA (Toxic Substances Control Act) inventory

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard<br>Immediate (acute) health hazard |
|-------------------------------------|---|

#### Heptane, branched cyclic (426260-76-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Fire hazard<br>Immediate (acute) health hazard<br>Delayed (chronic) health hazard |
|-------------------------------------|---|

#### distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

|                                     |                                 |
|-------------------------------------|---------------------------------|
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard |
|-------------------------------------|---------------------------------|

#### Petroleum gases, liquefied, sweetened (68476-86-8)

|                                     |   |
|-------------------------------------|---|
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard<br>Fire hazard<br>Sudden release of pressure hazard |
|-------------------------------------|---|

### 15.2. International regulations

#### CANADA

#### MASTER 25% STARTING FLUID 11 OZ.

|                      |   |
|----------------------|---|
| WHMIS Classification | Class B Division 5 - Flammable Aerosol<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|---|

#### Toluene (108-88-3)

|                      |   |
|----------------------|---|
| WHMIS Classification | Class B Division 2 - Flammable Liquid<br>Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |
|----------------------|---|

#### Heptane, branched cyclic (426260-76-6)

|                      |  |
|----------------------|--|
| WHMIS Classification | Class B Division 2 - Flammable Liquid<br>Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
|----------------------|--|

### EU-Regulations

#### Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

# MASTER 25% STARTING FLUID 11 OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.1; R45

Muta.Cat.2; R46

Repr.Cat.3; R63

F+; R12

Xn; R22

Xi; R38

R19

Full text of R-phrases: see section 16

### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

#### MASTER 25% STARTING FLUID 11 OZ.()

|   |   |
|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | Yes   |
| State or local regulations                            | U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) |

#### Toluene (108-88-3)

|   |
|---|
| U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) |
|---|

## SECTION 16: Other information

Indication of changes

: Revision - See : \*.

Training advice

: Ensure operators understand the flammability hazard. Ensure operators understand the hazard of oxygen enrichment. Receptacle under pressure.

Other information

: None.

Full text of H-phrases: see section 16:

|                     |   |
|---------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral) Category 4                                  |
| Aquatic Acute 1     | Hazardous to the aquatic environment - Acute Hazard Category 1    |
| Aquatic Chronic 1   | Hazardous to the aquatic environment - Chronic Hazard Category 1  |
| Aquatic Chronic 3   | Hazardous to the aquatic environment - Chronic Hazard Category 3  |
| Asp. Tox. 1         | Aspiration hazard Category 1                                      |
| Carc. 1A            | Carcinogenicity Category 1A                                       |
| Compressed gas      | Gases under pressure Compressed gas                               |
| Flam. Aerosol 1     | Flammable aerosol Category 1                                      |
| Flam. Gas 1         | Flammable gases Category 1  |
| Flam. Liq. 1        | Flammable liquids Category 1                                      |
| Flam. Liq. 2        | Flammable liquids Category 2                                      |
| Muta. 1B            | Germ cell mutagenicity Category 1B                                |
| Repr. 2             | Reproductive toxicity Category 2                                  |
| Skin Irrit. 2       | Skin corrosion/irritation Category 2                              |
| STOT RE 2           | Specific target organ toxicity (repeated exposure) Category 2     |
| STOT SE 3           | Specific target organ toxicity (single exposure) Category 3       |
| H220                | Extremely flammable gas   |
| H222                | Extremely flammable aerosol                                       |
| H224                | Extremely flammable liquid and vapor                              |
| H225                | Highly flammable liquid and vapor                                 |
| H280                | Contains gas under pressure; may explode if heated                |
| H302                | Harmful if swallowed  |
| H304                | May be fatal if swallowed and enters airways                      |
| H315                | Causes skin irritation  |
| H336                | May cause drowsiness or dizziness                                 |
| H340                | May cause genetic defects   |
| H350                | May cause cancer  |
| H361                | Suspected of damaging fertility or the unborn child               |
| H373                | May cause damage to organs through prolonged or repeated exposure |
| H400                | Very toxic to aquatic life  |
| H410                | Very toxic to aquatic life with long lasting effects              |

# MASTER 25% STARTING FLUID 11 OZ.

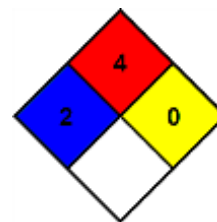
## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H412

Harmful to aquatic life with long lasting effects

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 4 Severe Hazard
- Physical : 1 Slight Hazard
- Personal Protection : B

SDS US (GHS HazCom 2012)

*The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product*

*Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.*

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 1 of 10

## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

**Product Name:** MOBILGREASE 28  
**Product Description:** Synthetic Base Stocks and Additives  
**Product Code:** 201550402020, 530626-85  
**Intended Use:** Grease

#### COMPANY IDENTIFICATION

**Supplier:** Aviall Australia Pty. Limited  
20-22 Lindaway Place  
Tullamarine  
Victoria 3043 Australia

|                                      |                               |              |
|--------------------------------------|-------------------------------|--------------|
| <b>Product Technical Information</b> | (8:00am to 4:30pm Mon to Fri) | 1300 919 904 |
| <b>Supplier General Contact</b>      | (03) 9339 3000                |              |

### SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Contains:** N-PHENYL-1-NAPHTHYLAMINE May produce an allergic reaction.

#### Other hazard information:

#### Physical / Chemical Hazards:

No significant hazards.

#### Health Hazards:

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation. Secondary amines or materials containing secondary amines should not be added to this product due to the risk of forming nitrosamines, some of which have been shown to be carcinogenic in lab animals.

#### Environmental Hazards:

Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 2 of 10

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

#### Hazardous Substance(s) or Complex Substance(s) required for disclosure

| Name                       | CAS#       | Concentration* | GHS Hazard Codes                                     |
|----------------------------|------------|----------------|--|
| N-PHENYL-1-NAPHTHYLAMINE   | 90-30-2    | 0.1 - < 1%     | H302, H317, H373, H400(M factor 1), H410(M factor 1) |
| N-OLEYLSARCOSINE           | 110-25-8   | 0.1 - < 1%     | H315, H318, H332, H400(M factor 1), H412             |
| PENTAERYTHRITOL            | 115-77-5   | 1 - < 5%       | None   |
| SODIUM NITRITE             | 7632-00-0  | 0.1 - < 1%     | H272(2)(S), H301, H319(2A), H400(M factor 1)         |
| SODIUM PHOSPHATE, TRIBASIC | 10101-89-0 | 0.1 - < 1%     | H315, H319(2A), H335                                 |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Other ingredients determined not to be hazardous up to 100%.

### SECTION 4 FIRST AID MEASURES

#### INHALATION

Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

#### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

#### NOTE TO PHYSICIAN

None

### SECTION 5 FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight streams of water

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 3 of 10

## FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulphur oxides

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** >204°C (400°F) [EST. FOR OIL, ASTM D-92 (COC)]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

### SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do so without risk. Scrape up spilled material with shovels into a suitable container for recycle or disposal.

**Water Spill:** Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

### ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

Prevent small spills and leakage to avoid slip hazard. Contains Sodium nitrite. Do not add amines which may form cancer causing nitrosamines.

**Static Accumulator:** This material is not a static accumulator.

### STORAGE

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 4 of 10

Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

| Substance Name             | Form            | Limit/Standard |                      |  | Note | Source        |
|----------------------------|-----------------|----------------|----------------------|--|------|---------------|
| PENTAERYTHRITOL            | Inhalable dust. | TWA            | 10 mg/m <sup>3</sup> |  |      | Australia WES |
| PENTAERYTHRITOL            |                 | TWA            | 10 mg/m <sup>3</sup> |  |      | ACGIH         |
| SODIUM PHOSPHATE, TRIBASIC |                 | STEL           | 5 mg/m <sup>3</sup>  |  |      | OARS WEEL     |

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### Biological limits

No biological limits allocated.

### ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Particulate

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Nitrile, Viton

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 5 of 10

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practise good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

### GENERAL INFORMATION

**Physical State:** Solid  
**Form:** Semi-fluid  
**Colour:** Dark Red  
**Odour:** Characteristic  
**Odour Threshold:** N/D

### IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15.6 °C):** 0.945 [Calculated]  
**Flammability (Solid, Gas):** N/A  
**Flash Point [Method]:** >204°C (400°F) [EST. FOR OIL, ASTM D-92 (COC)]  
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0  
**Autoignition Temperature:** N/D  
**Boiling Point / Range:** > 316°C (600°F) [Estimated]  
**Decomposition Temperature:** N/D  
**Vapour Density (Air = 1):** > 2 at 101 kPa  
**Vapour Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C  
**Evaporation Rate (n-butyl acetate = 1):** N/D  
**pH:** N/A  
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5  
**Solubility in Water:** Negligible  
**Viscosity:** 29.3 cSt (29.3 mm<sup>2</sup>/sec) at 40 °C | 5.7 cSt (5.7 mm<sup>2</sup>/sec) at 100°C [Estimated]  
**Oxidizing Properties:** See Hazards Identification Section.

### OTHER INFORMATION

**Freezing Point:** N/D  
**Melting Point:** N/D

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 6 of 10

NOTE: Most physical properties above are for the oil component in the material.

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**INCOMPATIBLE MATERIALS:** Strong oxidisers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

| <b>Hazard Class</b>  | <b>Conclusion / Remarks</b>  |
|--|--|
| <b>Inhalation</b>  |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| Irritation: No end point data for material.                    | Negligible hazard at ambient/normal handling temperatures.                                     |
| <b>Ingestion</b>   |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| <b>Skin</b>  |  |
| Acute Toxicity: No end point data for material.                | Minimally Toxic. Based on assessment of the components.  |
| Skin Corrosion/Irritation: No end point data for material.     | Negligible irritation to skin at ambient temperatures. Based on assessment of the components.  |
| <b>Eye</b>   |  |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.       |
| <b>Sensitisation</b>   |  |
| Respiratory Sensitization: No end point data for material.     | Not expected to be a respiratory sensitizer.   |
| Skin Sensitization: No end point data for material.            | Not expected to be a skin sensitizer. Based on assessment of the components.                   |
| <b>Aspiration:</b> Data available.                             | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. |
| <b>Germ Cell Mutagenicity:</b> No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components.                 |
| <b>Carcinogenicity:</b> No end point data for material.        | Not expected to cause cancer. Based on assessment of the components.                           |
| <b>Reproductive Toxicity:</b> No end point data for material.  | Not expected to be a reproductive toxicant. Based on assessment of the components.             |
| <b>Lactation:</b> No end point data for material.              | Not expected to cause harm to breast-fed children.   |
| <b>Specific Target Organ Toxicity (STOT)</b>                   |  |
| Single Exposure: No end point data for material.               | Not expected to cause organ damage from a single exposure.                                     |

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 7 of 10

|  |  |
|--|--|
| Repeated Exposure: No end point data for material. | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components. |
|--|--|

## TOXICITY FOR SUBSTANCES

| NAME                     | ACUTE TOXICITY                         |
|--------------------------|--|
| N-PHENYL-1-NAPHTHYLAMINE | Oral Lethality: LD 50 1625 mg/kg (Rat) |

## OTHER INFORMATION

### For the product itself:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

### Contains:

Synthetic base oils: Not expected to cause significant health effects under conditions of normal use, based on laboratory studies with the same or similar materials. Not mutagenic or genotoxic. Not sensitising in test animals and humans. N-phenyl-1-naphthylamine (PAN): A single oral overexposure may result in clinical signs/symptoms of cyanosis, headache, shallow respiration, dizziness, confusion, low blood pressure, convulsions, coma, or jaundice. Hematuria may occur due to bladder and kidney irritation, and anemia may develop later. Repeated exposure in laboratory animals caused liver and kidney damage and depressed bone marrow activity. Undiluted PAN is a skin sensitizer. Human testing of lubricants containing 1.0% PAN resulted in no reactions indicative of sensitization. Phenyl-alpha-naphthylamine (PAN): Undiluted PAN is a skin sensitizer. Human testing with lubricants containing 1.0% PAN caused no reactions indicative of sensitization. SODIUM NITRITE: Ingestion of sodium nitrite may reduce the oxygen-carrying capacity of blood and may cause cyanosis (bluish skin), shortness of breath, palpitations, coma, and/or death.

### IARC Classification:

The following ingredients are cited on the lists below:

--REGULATORY LISTS SEARCHED--

1 = IARC 1

2 = IARC 2A

3 = IARC 2B

## SECTION 12

## ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

### ECOTOXICITY

Material -- Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### MOBILITY

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

## SECTION 13

## DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable

Product Name: MOBILGREASE 28  
Revision Date: 23 Mar 2021  
Page 8 of 10

laws and regulations, and material characteristics at time of disposal.

#### DISPOSAL RECOMMENDATIONS

Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

| SECTION 14 | TRANSPORT INFORMATION |
|------------|-----------------------|
|------------|-----------------------|

**LAND (ADG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

| SECTION 15 | REGULATORY INFORMATION |
|------------|------------------------|
|------------|------------------------|

This material is not considered hazardous according to Australia Model Work Health and Safety Regulations.

Product is not regulated according to Australian Dangerous Goods Code.

No Poison Schedule number allocated by the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act.

#### REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Listed or exempt from listing/notification on the following chemical inventories (May contain substance(s) subject to notification to the EPA Active TSCA inventory prior to import to USA): AIIC, DSL, ENCS, IECSC, ISHL, TCSI, TSCA

**Special Cases:**

| Inventory | Status             |
|-----------|--------------------|
| KECI      | Restrictions Apply |

| SECTION 16 | OTHER INFORMATION |
|------------|-------------------|
|------------|-------------------|

#### KEY TO ABBREVIATIONS AND ACRONYMS:

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 9 of 10

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N/D = Not determined, N/A = Not applicable, STEL = Short-Term Exposure Limit, TWA = Time-Weighted Average

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H272(2): May intensify fire; oxidizer; Oxidizing Solid, Cat 2

H301: Toxic if swallowed; Acute Tox Oral, Cat 3

H302: Harmful if swallowed; Acute Tox Oral, Cat 4

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitisation, Cat 1

H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H335: May cause respiratory irritation; Target Organ Single, Resp Irr

H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

Composition: Component Table information was modified.

Perkal Pty Ltd Trading as Statewide Oil (South Australia): Section 01: Supplier Mailing Address information was deleted.

Perkal Pty Ltd Trading as Statewide Oil (Western Australia): Section 01: Supplier Mailing Address information was deleted.

Section 01: Company Contact Methods information was modified.

Section 01: Company Mailing Address information was deleted.

Section 01: Company Mailing Address information was modified.

Section 11: Tox List Cited Table information was deleted.

Section 16: HCode Key information was modified.

Southern Cross Lubes (Victoria and Tasmania, New South Wales and Australian Capital Territory): Section 01: Supplier Mailing Address information was deleted.

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DGN: 2006172DAU (553106)

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Prepared by: Exxon Mobil Corporation

EMBSI, Clinton NJ USA

Contact Point: See Section 1 for Local Contact number

**End of (M)SDS**

Product Name: MOBILGREASE 28

Revision Date: 23 Mar 2021

Page 10 of 10

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# SAFETY DATA SHEET

## 1. Identification

|  |   |
|--|---|
| Product identifier                                     | NAPA® Clean-R-Carb™ Carburetor Cleaner (50 State Formula) |
| Other means of identification                          |   |
| Product Code   | No. 091345 (Item# 1007990)                                |
| Recommended use  | Carburetor cleaner  |
| Recommended restrictions                               | None known.   |
| Manufacturer/Importer/Supplier/Distributor information |   |
| Manufactured or sold by:                               |   |
| Company name   | CRC Industries, Inc.                                      |
| Address  | 885 Louis Dr.<br>Warminster, PA 18974 US                  |
| Telephone  |   |
| General Information                                    | 215-674-4300  |
| Technical Assistance                                   | 800-521-3168  |
| Customer Service                                       | 800-272-4620  |
| 24-Hour Emergency                                      | 800-424-9300 (US)   |
| (CHEMTREC)   | 703-527-3887 (International)                              |
| Website  | www.crcindustries.com                                     |

## 2. Hazard(s) identification

|                       |  |                             |
|-----------------------|--|-----------------------------|
| Physical hazards      | Flammable aerosols                                     | Category 1                  |
|                       | Gases under pressure                                   | Compressed gas              |
| Health hazards        | Skin corrosion/irritation                              | Category 2                  |
|                       | Serious eye damage/eye irritation                      | Category 2A                 |
|                       | Specific target organ toxicity, single exposure        | Category 3 narcotic effects |
|                       | Aspiration hazard                                      | Category 1                  |
| Environmental hazards | Hazardous to the aquatic environment, acute hazard     | Category 2                  |
|                       | Hazardous to the aquatic environment, long-term hazard | Category 2                  |
| OSHA defined hazards  | Not classified.  |                             |
| Label elements        |  |                             |



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

Precautionary statement  
Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves. Avoid release to the environment.

|   |  |
|---|--|
| <b>Response</b>                                   | If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage. |
| <b>Storage</b>                                    | Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.   |
| <b>Disposal</b>                                   | Dispose of contents/container in accordance with local/regional/national regulations.  |
| <b>Hazard(s) not otherwise classified (HNO C)</b> | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.  |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name       | Common name and synonyms | CAS number | %       |
|---------------------|--------------------------|------------|---------|
| acetone             |                          | 67-64-1    | 80 - 90 |
| carbon dioxide      |                          | 124-38-9   | 5 - 10  |
| n-heptane           |                          | 142-82-5   | 3 - 5   |
| 3-methylhexane      |                          | 589-34-4   | 1 - 3   |
| 2-methylhexane      |                          | 591-76-4   | < 1     |
| 3-ethylpentane      |                          | 617-78-7   | < 0.3   |
| 3,3-dimethylpentane |                          | 562-49-2   | < 0.2   |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.  |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.  |
| <b>Ingestion</b>  | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.   |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. |
| <b>Special protective equipment and precautions for firefighters</b> | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.  |
| <b>Fire-fighting equipment/instructions</b>                          | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.   |
| <b>General fire hazards</b>  | Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.  |

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

### Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

### Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                    | Type | Value                             |
|-------------------------------|------|-----------------------------------|
| acetone (CAS 67-64-1)         | PEL  | 2400 mg/m3<br>1000 ppm            |
| carbon dioxide (CAS 124-38-9) | PEL  | 9000 mg/m3                        |
| n-heptane (CAS 142-82-5)      | PEL  | 5000 ppm<br>2000 mg/m3<br>500 ppm |

#### US. ACGIH Threshold Limit Values

| Components                         | Type | Value   |
|------------------------------------|------|---------|
| 2-methylhexane (CAS 591-76-4)      | STEL | 500 ppm |
| 3,3-dimethylpentane (CAS 562-49-2) | TWA  | 400 ppm |
|                                    | STEL | 500 ppm |
| 3-ethylpentane (CAS 617-78-7)      | TWA  | 400 ppm |
|                                    | STEL | 500 ppm |

**US. ACGIH Threshold Limit Values**

| Components                    | Type | Value     |
|-------------------------------|------|-----------|
| 3-methylhexane (CAS 589-34-4) | TWA  | 400 ppm   |
|                               | STEL | 500 ppm   |
| acetone (CAS 67-64-1)         | TWA  | 400 ppm   |
|                               | STEL | 500 ppm   |
| carbon dioxide (CAS 124-38-9) | TWA  | 250 ppm   |
|                               | STEL | 30000 ppm |
| n-heptane (CAS 142-82-5)      | TWA  | 5000 ppm  |
|                               | STEL | 500 ppm   |
|                               | TWA  | 400 ppm   |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                    | Type    | Value       |
|-------------------------------|---------|-------------|
| acetone (CAS 67-64-1)         | TWA     | 590 mg/m3   |
|                               |         | 250 ppm     |
| carbon dioxide (CAS 124-38-9) | STEL    | 54000 mg/m3 |
|                               |         | 30000 ppm   |
| n-heptane (CAS 142-82-5)      | TWA     | 9000 mg/m3  |
|                               |         | 5000 ppm    |
|                               |         | 1800 mg/m3  |
|                               | Ceiling | 440 ppm     |
|                               |         | 350 mg/m3   |
|                               | TWA     | 85 ppm      |

**Biological limit values****ACGIH Biological Exposure Indices**

| Components            | Value   | Determinant | Specimen | Sampling Time |
|-----------------------|---------|-------------|----------|---------------|
| acetone (CAS 67-64-1) | 25 mg/l | Acetone     | Urine    | *             |

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear protective gloves such as: Nitrile. Polyvinyl alcohol (PVA). Viton/butyl.

**Other**

Wear appropriate chemical resistant clothing.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Aerosol.

**Color**

Colorless.

**Odor**

Solvent.

**Odor threshold**

Not available.

|   |                                    |
|---|------------------------------------|
| <b>pH</b>   | Not available.                     |
| <b>Melting point/freezing point</b>                 | -138.5 °F (-94.7 °C) estimated     |
| <b>Initial boiling point and boiling range</b>      | 132.9 °F (56.1 °C) estimated       |
| <b>Flash point</b>                                  | < 0 °F (< -17.8 °C) Tag Closed Cup |
| <b>Evaporation rate</b>                             | Fast.                              |
| <b>Flammability (solid, gas)</b>                    | Not available.                     |
| <b>Upper/lower flammability or explosive limits</b> |                                    |
| <b>Flammability limit - lower (%)</b>               | 1.1 % estimated                    |
| <b>Flammability limit - upper (%)</b>               | 12.8 % estimated                   |
| <b>Vapor pressure</b>                               | 5061 hPa estimated                 |
| <b>Vapor density</b>                                | > 2 (air = 1)                      |
| <b>Relative density</b>                             | 0.84 estimated                     |
| <b>Solubility (water)</b>                           | Slightly soluble.                  |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                     |
| <b>Auto-ignition temperature</b>                    | 539.6 °F (282 °C) estimated        |
| <b>Decomposition temperature</b>                    | Not available.                     |
| <b>Viscosity (kinematic)</b>                        | Not available.                     |
| <b>Percent volatile</b>                             | 91.4 % estimated                   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.                   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.   |
| <b>Conditions to avoid</b>                | Heat, flames and sparks. Contact with incompatible materials.   |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Strong acids. Strong bases. Aldehydes. Alkalies. Amines. Ammonia. Halogens. Peroxides. |
| <b>Hazardous decomposition products</b>   | Carbon oxides.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.                   |
| <b>Skin contact</b> | Causes skin irritation.  |
| <b>Eye contact</b>  | Causes serious eye irritation.   |
| <b>Ingestion</b>    | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |

|   |  |
|---|--|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
|---|--|

### Information on toxicological effects

|                       |   |
|-----------------------|---|
| <b>Acute toxicity</b> | May be fatal if swallowed and enters airways. |
|-----------------------|---|

| Components                    | Species | Test Results |
|-------------------------------|---------|--------------|
| 3-methylhexane (CAS 589-34-4) |         |              |
| <b>Acute</b>                  |         |              |
| <b>Dermal</b>                 |         |              |
| LD50                          | Rabbit  | > 2000 mg/kg |

| Components               | Species | Test Results |
|--------------------------|---------|--------------|
| <b>Oral</b>              |         |              |
| LD50                     | Rat     | > 2000 mg/kg |
| acetone (CAS 67-64-1)    |         |              |
| <b>Acute</b>             |         |              |
| <b>Dermal</b>            |         |              |
| LD50                     | Rabbit  | 20000 mg/kg  |
| <b>Oral</b>              |         |              |
| LD50                     | Rat     | 5800 mg/kg   |
| n-heptane (CAS 142-82-5) |         |              |
| <b>Acute</b>             |         |              |
| <b>Dermal</b>            |         |              |
| LD50                     | Rabbit  | 3000 mg/kg   |

\* Estimates for product may be based on additional component data not shown.

|   |   |
|---|---|
| <b>Skin corrosion/irritation</b>                                      | Causes skin irritation.   |
| <b>Serious eye damage/eye irritation</b>                              | Causes serious eye irritation.  |
| <b>Respiratory sensitization</b>                                      | Not a respiratory sensitizer.   |
| <b>Skin sensitization</b>   | This product is not expected to cause skin sensitization.   |
| <b>Germ cell mutagenicity</b>   | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  |
| <b>Carcinogenicity</b>  | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.   |
| <b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>         |   |
| Not listed.   |   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> |   |
| Not regulated.  |   |
| <b>US. National Toxicology Program (NTP) Report on Carcinogens</b>    |   |
| Not listed.   |   |
| <b>Reproductive toxicity</b>  | This product is not expected to cause reproductive or developmental effects.  |
| <b>Specific target organ toxicity - single exposure</b>               | May cause drowsiness and dizziness.   |
| <b>Specific target organ toxicity - repeated exposure</b>             | Not classified.   |
| <b>Aspiration hazard</b>  | May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death. |
| <b>Chronic effects</b>  | Prolonged inhalation may be harmful.  |

## 12. Ecological information

| Ecotoxicity              |      | Toxic to aquatic life with long lasting effects.    |                              |
|--------------------------|------|---|------------------------------|
| Components               |      | Species   | Test Results                 |
| acetone (CAS 67-64-1)    |      |   |                              |
| Aquatic                  |      |   |                              |
| Crustacea                | EC50 | Water flea (Daphnia magna)                          | 10294 - 17704 mg/l, 48 hours |
| Fish                     | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4740 - 6330 mg/l, 96 hours   |
| n-heptane (CAS 142-82-5) |      |   |                              |
| Aquatic                  |      |   |                              |
| Acute                    |      |   |                              |
| Crustacea                | EC50 | Water flea (Daphnia magna)                          | 1.5 mg/l, 48 hours           |
| Fish                     | LC50 | Fathead minnow (Pimephales promelas)                | 2.1 - 2.98 mg/l, 96 hours    |

\* Estimates for product may be based on additional component data not shown.

|                                      |  |
|--------------------------------------|--|
| <b>Persistence and degradability</b> | No data is available on the degradability of this product. |
|--------------------------------------|--|

## Bioaccumulative potential

### Partition coefficient n-octanol / water (log Kow)

|           |       |
|-----------|-------|
| acetone   | -0.24 |
| n-heptane | 4.66  |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

---

## 13. Disposal considerations

|  |   |
|--|---|
| <b>Disposal of waste from residues / unused products</b> | This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations. |
| <b>Hazardous waste code</b>                              | D001: Waste Flammable material with a flash point <140 F<br>F003: Waste Non-halogenated Solvent - Spent Non-halogenated Solvent   |
| <b>Contaminated packaging</b>                            | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.  |

---

## 14. Transport information

### DOT

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Label(s)</b>                     | 2.1   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Special provisions</b>           | N82   |
| <b>Packaging exceptions</b>         | 306   |
| <b>Packaging non bulk</b>           | 304   |
| <b>Packaging bulk</b>               | None  |

### IATA

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | Aerosols, flammable, Limited Quantity                                   |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2.1   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>ERG Code</b>                     | 10L   |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |
| <b>Other information</b>            |   |

|                                     |                            |
|-------------------------------------|----------------------------|
| <b>Passenger and cargo aircraft</b> | Allowed with restrictions. |
| <b>Cargo aircraft only</b>          | Allowed with restrictions. |

### IMDG

|                                     |   |
|-------------------------------------|---|
| <b>UN number</b>                    | UN1950  |
| <b>UN proper shipping name</b>      | AEROSOLS, Limited Quantity  |
| <b>Transport hazard class(es)</b>   |   |
| <b>Class</b>                        | 2   |
| <b>Subsidiary risk</b>              | -   |
| <b>Packing group</b>                | Not applicable.   |
| <b>Environmental hazards</b>        |   |
| <b>Marine pollutant</b>             | No.   |
| <b>EmS</b>                          | F-D, S-U  |
| <b>Special precautions for user</b> | Read safety instructions, SDS and emergency procedures before handling. |

## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

3,3-dimethylpentane (CAS 562-49-2) Listed.

acetone (CAS 67-64-1) Listed.

#### CERCLA Hazardous Substances: Reportable quantity

3,3-dimethylpentane (CAS 562-49-2) 100 LBS

acetone (CAS 67-64-1) 5000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

#### Safe Drinking Water Act (SDWA)

Not regulated.

#### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

acetone (CAS 67-64-1) 6532

#### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

acetone (CAS 67-64-1) 35 %WV

#### DEA Exempt Chemical Mixtures Code Number

acetone (CAS 67-64-1) 6532

#### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

acetone (CAS 67-64-1) Low priority

#### Food and Drug Administration (FDA)

Not regulated.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - Yes

Hazard categories Delayed Hazard - No

Fire Hazard - Yes

Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

### US state regulations

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

acetone (CAS 67-64-1)

#### US. New Jersey Worker and Community Right-to-Know Act

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Massachusetts RTK - Substance List

2-methylhexane (CAS 591-76-4)

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Pennsylvania Worker and Community Right-to-Know Law

3,3-dimethylpentane (CAS 562-49-2)

3-methylhexane (CAS 589-34-4)

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. Rhode Island RTK

acetone (CAS 67-64-1)

carbon dioxide (CAS 124-38-9)

n-heptane (CAS 142-82-5)

#### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

##### US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

acetaldehyde (CAS 75-07-0)

Listed: April 1, 1988

benzene (CAS 71-43-2)

Listed: February 27, 1987

cumene (CAS 98-82-8)

Listed: April 6, 2010

ethylbenzene (CAS 100-41-4)

Listed: June 11, 2004

naphthalene (CAS 91-20-3)

Listed: April 19, 2002

##### US - California Proposition 65 - CRT: Listed date/Developmental toxin

benzene (CAS 71-43-2)

Listed: December 26, 1997

toluene (CAS 108-88-3)

Listed: January 1, 1991

##### US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

benzene (CAS 71-43-2)

Listed: December 26, 1997

#### Volatile organic compounds (VOC) regulations

##### EPA

**VOC content (40 CFR 51.100(s))** 9.2 %

**Consumer products (40 CFR 59, Subpt. C)** Compliant

##### State

**Consumer products** This product is regulated as a Carburetor Cleaner. This product is compliant for use in all 50 states.

**VOC content (CA)** 9.2 %

**VOC content (OTC)** 9.2 %

#### International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | Yes                    |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 02-28-2014

**Revision date** 10-04-2017  
**Prepared by** Allison Yoon  
**Version #** 04  
**Further information** CRC # 920B/1002914  
**HMIS® ratings** Health: 2  
Flammability: 4  
Physical hazard: 0  
Personal protection: B  
**NFPA ratings** Health: 2  
Flammability: 4  
Instability: 0

**NFPA ratings**



**Disclaimer**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

**Revision Information**

Product and Company Identification: Product Codes  
Transport Information: Agency Name, Packaging Type, and Transport Mode Selection  
Other information, including date of preparation or last revision: Further information



# SAFETY DATA SHEET

Revision Date 11-May-2020

Version 3

## 1. IDENTIFICATION

**Product identifier**

**Product Name** GASKET REMOVER 4 OZ.

**Other means of identification**

**Product Code** 80645

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Adhesive Remover

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

**24-hour emergency phone number**

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

**May Also Be Distributed by:**

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Gases under pressure

Compressed gas

**Label elements**

**Emergency Overview**

Contains gas under pressure; may explode if heated



This product contains substances which at their given concentration, are considered to be hazardous to health

|                         |                                      |                   |
|-------------------------|--------------------------------------|-------------------|
| <b>Appearance</b> White | <b>Physical state</b> Viscous liquid | <b>Odor</b> Ester |
|-------------------------|--------------------------------------|-------------------|

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 4. FIRST AID MEASURES

**Description of first aid measures**

|   |   |
|---|---|
| <b>General advice</b>                     | Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.  |
| <b>Eye contact</b>                        | IF IN EYES: Wash with plenty of water.  |
| <b>Skin contact</b>                       | In case of contact with liquefied gas, thaw frosted parts with lukewarm water.  |
| <b>Inhalation</b>                         | Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult. |
| <b>Ingestion</b>                          | IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.                                  |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.                                 |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Keep victim warm and quiet.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use extinguishing agent suitable for type of surrounding fire, Dry chemical or CO<sub>2</sub>, Water spray, fog or regular foam, Move containers from fire area if you can do it without risk, Damaged cylinders should be handled only by specialists

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

Some may burn but none ignite readily. Ruptured cylinders may rocket.

**Explosion data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Do not touch or walk through spilled material. Stop leak if you can do it without risk.

**Other Information** Ventilate the area.

**Environmental precautions**

**Environmental precautions** Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment** If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.

**Methods for cleaning up** Do not direct water at spill or source of leak.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Contents under pressure. Do not puncture or incinerate cans.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Protect from sunlight. Store in a well-ventilated place.

**Incompatible materials** Strong oxidizing agents, Acids, Alkalis

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines****Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection**

None under normal use conditions. In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Viscous liquid           |
| <b>Appearance</b>     | White                    |
| <b>Odor</b>           | Ester                    |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                                    | <u>Values</u>            | <u>Remarks • Method</u>          |
|--|--------------------------|----------------------------------|
| pH   | 5.9-7.1                  |                                  |
| Melting point / freezing point                     | No information available |                                  |
| Boiling point / boiling range                      | No information available |                                  |
| Flash point  | > 95 °C / > 203 °F       | Pensky-Martens Closed Cup (PMCC) |
| Evaporation rate                                   | <1                       | Butyl acetate = 1                |
| Flammability (solid, gas)                          | No information available |                                  |
| Flammability Limit in Air                          |                          |                                  |
| Upper flammability limit:                          | No information available |                                  |
| Lower flammability limit:                          | No information available |                                  |
| Vapor pressure                                     | No information available |                                  |
| Vapor density                                      | >1                       | Air = 1                          |
| Relative density                                   | 1.07                     |                                  |
| Water solubility                                   | Soluble in water         |                                  |
| Solubility(ies)                                    | No information available |                                  |
| Partition coefficient                              | No information available |                                  |
| Autoignition temperature                           | No information available |                                  |
| Decomposition temperature                          | No information available |                                  |
| Kinematic viscosity                                | No information available |                                  |
| Dynamic viscosity                                  | No information available |                                  |
| Explosive properties                               | No information available |                                  |
| Oxidizing properties                               | No information available |                                  |
| <b>Other Information</b>                           |                          |                                  |
| Softening point                                    | No information available |                                  |
| Molecular weight                                   | No information available |                                  |
| VOC Content (%)                                    | 28.55                    |                                  |
| Density  | No information available |                                  |
| Bulk density                                       | No information available |                                  |
| SADT (self-accelerating decomposition temperature) | No information available |                                  |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available

**Chemical stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents, Acids, Alkalis

**Hazardous Decomposition Products**

Carbon oxides

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.   |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes. |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis.                                       |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.                                |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.  
IARC (International Agency for Research on Cancer)  
*Not classifiable as a human carcinogen*

The following values are calculated based on chapter 3.1 of the GHS document .

|                        |             |
|------------------------|-------------|
| <b>ATEmix (oral)</b>   | 15889 mg/kg |
| <b>ATEmix (dermal)</b> | 18537 mg/kg |

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0.01 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b> | Do not reuse container.   |

US EPA Waste Number Not applicable

#### 14. TRANSPORT INFORMATION

##### DOT

UN/ID No 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.2  
 Special Provisions 126

##### IATA

UN/ID No ID 8000  
 Proper shipping name: Consumer commodity  
 Hazard Class 9  
 ERG Code 9L

##### IMDG

UN/ID No 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.2  
 EmS-No F-D, S-U

#### 15. REGULATORY INFORMATION

##### International Inventories

|               |                |
|---------------|----------------|
| TSCA          | Complies       |
| DSL/NDSL      | Complies       |
| EINECS/ELINCS | Complies       |
| ENCS          | Not determined |
| IECSC         | Complies       |
| KECL          | Not determined |
| PICCS         | Complies       |
| AICS          | Not determined |

##### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

##### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

##### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical Name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| NITROGEN<br>7727-37-9        | X          | X             | X            |
| 2-PHENOXYETHANOL<br>122-99-6 | X          | -             | X            |
| TRIETHANOLAMINE<br>102-71-6  | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 1 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)


**Revision Date**

11-May-2020

**Disclaimer**

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**End of Safety Data Sheet**

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 1                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® EP WHEEL BEARING GREASE

### Recommended use of the chemical and restrictions on use

|   |  |
|---|--|
| <b>Details of the supplier of the safety data sheet</b><br><br>Valvoline LLC<br>3499 Blazer Parkway<br>Lexington, KY 40509<br>United States of America<br><br>SDS@valvoline.com | <b>Emergency telephone number</b><br>1-800-VALVOLINE<br><br><b>Regulatory Information Number</b><br>1-800-TEAMVAL<br><br><b>Product Information</b><br>1-800-TEAMVAL |
|---|--|

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.


## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components


| Chemical Name   | CAS-No.    | Classification    | Concentration (%) |
|---|------------|-------------------|-------------------|
| DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC | 64742-65-0 | Asp. Tox. 1; H304 | 74.99             |

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 2                   |
| SAFETY DATA SHEET   |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

|  |            |                                       |       |
|--|------------|---------------------------------------|-------|
| ASPHALT  | 8052-42-4  | Not a hazardous substance or mixture. | 24.99 |
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>NAPHTA | 64742-52-5 | Not a hazardous substance or mixture. | 9.99  |

#### SECTION 4. FIRST AID MEASURES

|   |   |
|---|---|
| General advice  | : No hazards which require special first aid measures.  |
| If inhaled  | : If breathed in, move person into fresh air.<br>If unconscious place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.   |
| In case of skin contact                                     | : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.  |
| In case of eye contact                                      | : Remove contact lenses.<br>Protect unharmed eye.   |
| If swallowed  | : Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.  |
| Most important symptoms and effects, both acute and delayed | : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.<br><br>Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:<br>stomach or intestinal upset (nausea, vomiting, diarrhea)<br>irritation (nose, throat, airways) |
| Notes to physician  | : No hazards which require special first aid measures.  |

|  |  |                           |
|--|--|---------------------------|
|  |  | Page: 3                   |
| <b>SAFETY DATA SHEET</b>   |  | Revision Date: 07/31/2016 |
|  |  | Print Date: 9/27/2016     |
|  |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600   |  | Version: 1.1              |

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
sulfur oxides  
Hydrocarbons  
Aldehydes  
Ketones  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---


## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 4                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

application area.  
For personal protection see section 8.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.


Materials to avoid : No materials to be especially mentioned.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

| Components  | CAS-No.    | Value type<br>(Form of exposure) | Control parameters /<br>Permissible concentration         | Basis       |
|---|------------|----------------------------------|---|-------------|
| DISTILLATES (PETROLEUM),<br>SOLVENT-DEWAXED HEAVY<br>PARAFFINIC | 64742-65-0 | PEL                              | 500 ppm<br>2,000 mg/m3                                    | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |
|   |            | PEL                              | 5 mg/m3<br>Mist.  | OSHA_TRANS  |
|   |            | TWA                              | 5 mg/m3<br>Mist.  | Z1A         |
|   |            | TWA                              | 400 ppm<br>1,600 mg/m3                                    | Z1A         |
| ASPHALT   | 8052-42-4  | TWA                              | 0.5 mg/m3<br>Inhalable fraction.<br>(as benzene solubles) | ACGIH       |
|   |            | Ceil_Time                        | 5 mg/m3<br>Fume.  | NIOSH/GUIDE |
|   |            | PEL                              | 500 ppm<br>2,000 mg/m3                                    | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |
| DISTILLATES (PETROLEUM),<br>HYDROTREATED HEAVY<br>NAPHTA        | 64742-52-5 | PEL                              | 5 mg/m3<br>Mist.  | OSHA_TRANS  |
|   |            | REL                              | 5 mg/m3<br>Mist.  | NIOSH/GUIDE |
|   |            | STEL                             | 10 mg/m3<br>Mist.   | NIOSH/GUIDE |

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known,

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 5                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

suspected or apparent adverse effects.


#### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.
- Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : General industrial hygiene practice.

---

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : gel
- Physical state : liquid
- Colour : red
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available  
: 640 °F / 338 °C
- Flash point : 471 °F / 244 °C
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : < 0.01 mmHg (20 °C)
- Relative vapour density : No data available

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 6                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

Relative density : 0.95 (15.6 °C)

Density : 0.90 g/cm<sup>3</sup> (20 °C)

Solubility(ies)  
  Water solubility : negligible  
  Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : > 315 °C

Thermal decomposition : No data available

Viscosity  
  Viscosity, dynamic : No data available  
  Viscosity, kinematic : > 20.5 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.


Incompatible materials : Strong oxidizing agents

Hazardous decomposition products  
  carbon dioxide and carbon monoxide  
  Hydrocarbons  
  Sulphur oxides

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
  Skin contact  
  Eye Contact

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 7                   |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

#### Ingestion

##### Acute toxicity

Not classified based on available information.

##### Product:

Acute oral toxicity : Acute toxicity estimate (Rat): 3,019 mg/kg

Acute dermal toxicity : Acute toxicity estimate (Rabbit): 169,492 mg/kg

##### Components:

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Acute oral toxicity : LD 50 (Rat): > 5 g/kg

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: Not classified as acutely toxic by inhalation under GHS.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Remarks: No mortality observed at this dose.

##### Skin corrosion/irritation

Not classified based on available information.

##### Product:

Result: Not irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

##### Components:

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to skin

ASPHALT:

Result: Not irritating to skin

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:


Species: Rabbit

Result: Not irritating to skin

##### Serious eye damage/eye irritation

Not classified based on available information.

##### Product:

|  |  |                           |
|--|--|---------------------------|
|  |  | Page: 8                   |
| <b>SAFETY DATA SHEET</b>   |  | Revision Date: 07/31/2016 |
|  |  | Print Date: 9/27/2016     |
|  |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600   |  | Version: 1.1              |

Result: Not irritating to eyes

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to eyes

ASPHALT:

Result: Possibly irritating to eyes

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Rabbit

Result: Mildly irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available


**Carcinogenicity:**

**IARC**

Group 2B: Possibly carcinogenic to humans

ASPHALT

8052-42-4

|  |  |                           |
|--|--|---------------------------|
|  |  | Page: 9                   |
| <b>SAFETY DATA SHEET</b>   |  | Revision Date: 07/31/2016 |
|  |  | Print Date: 9/27/2016     |
|  |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE  |  | Version: 1.1              |
| NP75600  |  |                           |

#### OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
 Exposure time: 96 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l  
 Exposure time: 48 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l  
 Exposure time: 21 d  
 Test Type: semi-static test  
 Test substance: WAF  
 Method: OECD Test Guideline 211


### Persistence and degradability

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Biodegradability : Result: Inherently biodegradable  
 Biodegradation: 31 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

### Bioaccumulative potential

No data available

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 10                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE   |  | Version: 1.1              |
| NP75600   |  |                           |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

---

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD CLASS | SUBSIDIARY HAZARDS | PACKING GROUP | MARINE POLLUTANT / LTD. QTY. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
|           |                      |               |                    |               |                              |

**U.S. DOT - ROAD**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**CFR\_RAIL\_C**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**U.S. DOT - INLAND WATERWAYS**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_ROAD\_C**


|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_RAIL\_C**

|                     |
|---------------------|
| Not dangerous goods |
|                     |

**TDG\_INWT\_C**

|                     |
|---------------------|
| Not dangerous goods |
|---------------------|

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 11                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE   |  | Version: 1.1              |
| NP75600   |  |                           |

#### INTERNATIONAL MARITIME DANGEROUS GOODS

|                     |
|---------------------|
| Not dangerous goods |
|                     |

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

|                     |
|---------------------|
| Not dangerous goods |
|                     |

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

|                     |
|---------------------|
| Not dangerous goods |
|                     |

#### MX\_DG

|                     |
|---------------------|
| Not dangerous goods |
|                     |

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

|                  |    |
|------------------|----|
| Marine pollutant | no |
|------------------|----|

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

#### SECTION 15. REGULATORY INFORMATION

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.  
**SARA 313**

**California Prop 65** Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**


TSCA : On TSCA Inventory

AUSTR : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL.

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

|   |                           |
|---|---------------------------|
|  | Page: 12                  |
| <b>SAFETY DATA SHEET</b>  | Revision Date: 07/31/2016 |
|   | Print Date: 9/27/2016     |
|   | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  | Version: 1.1              |

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

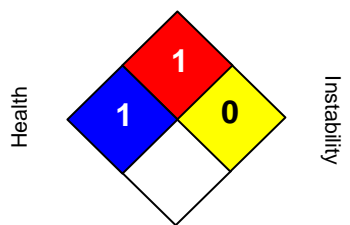
#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

## SECTION 16. OTHER INFORMATION

#### Further information

Revision Date: 07/31/2016

| NFPA:  | HMIS III:  |               |          |                     |          |                        |          |
|--|--|---------------|----------|---------------------|----------|------------------------|----------|
| <p>Flammability</p>  <p>Health</p> <p>Instability</p> <p>Special hazard.</p> | <table border="1"> <tr> <td><b>HEALTH</b></td><td><b>1</b></td></tr> <tr> <td><b>FLAMMABILITY</b></td><td><b>1</b></td></tr> <tr> <td><b>PHYSICAL HAZARD</b></td><td><b>0</b></td></tr> </table> <p>0 = not significant, 1 = Slight,<br/>2 = Moderate, 3 = High<br/>4 = Extreme, * = Chronic</p> | <b>HEALTH</b> | <b>1</b> | <b>FLAMMABILITY</b> | <b>1</b> | <b>PHYSICAL HAZARD</b> | <b>0</b> |
| <b>HEALTH</b>  | <b>1</b>   |               |          |                     |          |                        |          |
| <b>FLAMMABILITY</b>  | <b>1</b>   |               |          |                     |          |                        |          |
| <b>PHYSICAL HAZARD</b>   | <b>0</b>   |               |          |                     |          |                        |          |

#### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

#### Full text of H-Statements referred to under sections 2 and 3.


H304 May be fatal if swallowed and enters airways.

Sources of key data used to compile the Safety Data Sheet

Valvoline internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-825-8654).

|   |  |                           |
|---|--|---------------------------|
|  |  | Page: 13                  |
| <b>SAFETY DATA SHEET</b>  |  | Revision Date: 07/31/2016 |
|   |  | Print Date: 9/27/2016     |
|   |  | SDS Number: R0172170      |
| NAPA® EP WHEEL BEARING GREASE<br>NP75600  |  | Version: 1.1              |

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
 BEI : Biological Exposure Index  
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
 FG : Food grade  
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
 H-statement : Hazard Statement  
 IATA : International Air Transport Association.  
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
 IMDG : International Maritime Code for Dangerous Goods  
 ISO : International Organization for Standardization  
 logPow : octanol-water partition coefficient  
 LCxx : Lethal Concentration, for xx percent of test population  
 LDxx : Lethal Dose, for xx percent of test population.  
 ICxx : Inhibitory Concentration for xx of a substance  
 Ecxx : Effective Concentration of xx  
 N.O.S.: Not Otherwise Specified  
 OECD : Organization for Economic Co-operation and Development  
 OEL : Occupational Exposure Limit  
 P-Statement : Precautionary Statement  
 PBT : Persistent , Bioaccumulative and Toxic  
 PPE : Personal Protective Equipment  
 STEL : Short-term exposure limit  
 STOT : Specific Target Organ Toxicity  
 TLV : Threshold Limit Value  
 TWA : Time-weighted average  
 vPvB : Very Persistent and Very Bioaccumulative  
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT : Department of Transportation  
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
 HMIRC : Hazardous Materials Information Review Commission  
 HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System

# SAFETY DATA SHEET

Prepared to U.S. OSHA, Canadian WHMIS Standards, and the Global Harmonization Standard

DATE OF PREPARATION: September 8, 2000  
DATE OF REVISION: October 21, 2020

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

### IDENTIFICATION of the SUBSTANCE or PREPARATION:

TRADE NAME:

**NOVUS PLASTIC POLISH #1** (Plastic Clean & Shine, NOVUS No 1)

PRODUCT CODES:

7012, 7020, 7023, 7024, 7026, 7050, 7052, 7299, 7302

### RELEVANT USES of the SUBSTANCE:

Clean and Restore Plastic Surfaces

### USES ADVISED AGAINST:

Other than Relevant Use, Including Glass Polishing

### COMPANY/UNDERTAKING IDENTIFICATION:

U.S. DISTRIBUTOR'S NAME:

**NOVUS 2 LLC**

ADDRESS:

650 Pelham Boulevard, Suite 100  
St Paul, MN 55114

CANADIAN DISTRIBUTOR'S NAME:

**FIX AUTO**

ADDRESS:

99 Émilien-Marcoux Suite 101  
Blainville, Québec J7C 0B4, Canada

EMERGENCY PHONE (medical):

1-800-420-8036 [24-hrs]

EMAIL ADDRESS FOR SDS INFORMATION:

[msds-info@novusglass.com](mailto:msds-info@novusglass.com)

## 2. HAZARD IDENTIFICATION

This product has been classified under OSHA's Hazard Communication Standard (29CFR §1910.1200), and Canadian WHMIS (HPR). This is a self-classification.

### GHS CLASSIFICATION:

None

### GHS LABEL ELEMENTS:

Signal Word: None

Hazard Statements: None

Precautionary Statements:

Prevention: None

Response: None

Storage: None

Disposal: None

Hazard Symbols/Pictograms: None

### 3. COMPOSITION and INFORMATION ON INGREDIENTS

SUBSTANCE or MIXTURE:

Mixture

CHEMICAL NAME/CLASS:

Organic Liquid/Polymer/Water Mixture

| CHEMICAL NAME                            | CAS #      | % w/w  | GHS Classification<br>Hazard Statements/Pictograms   |
|--|------------|--------|--|
| Isopropyl Alcohol                        | 67-63-0    | ≤ 0.5% | Classification: Flam Liq Cat. 2, Eye Irr Cat. 2A, STOT SE 3<br>Hazard Statement Codes: H225, H319, H336<br>Hazard Symbols/Pictograms: GHS02, GHS07 |
| Polydimethylsiloxane, Silanol Terminated | 70131-67-8 | < 5.0% | Classification: Not Applicable   |
| Dimethylpolysiloxane                     | 63148-62-9 | < 2.0% | Classification: Not Applicable   |

### 4. FIRST-AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES:** Contaminated individuals must be taken for medical attention if any adverse effects occur. Take a copy of label and SDS to health professional with victim.

**SKIN EXPOSURE:** If this material contaminates the skin, begin decontamination with running water. Recommended flushing is for 15 minutes if any sign of skin irritation develops. Contaminated individual should seek immediate medical attention if any adverse exposure symptoms develop.

**EYE EXPOSURE:** If this product enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 20 minutes. Contaminated individual must seek medical attention if adverse effect continues after flushing.

**INHALATION:** If this product is inhaled, remove contaminated individual to fresh air. Contaminated individual must seek medical attention if adverse effects occur.

**INGESTION:** If this material is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. If victim is convulsing, maintain an open airway and obtain immediate medical attention.

**MOST IMPORTANT SYMPTOMS/EFFECTS (ACUTE AND CHRONIC):** See Sections 2 (Hazard Identification) and 11 (Toxicological Information) for description of possible health effects from exposure to this product.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Dermatitis and other pre-existing skin disorders may be aggravated by prolonged overexposure to this product.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED:** Treat symptoms and eliminate overexposure.

### 5. FIRE-FIGHTING MEASURES

**FIRE EXTINGUISHING MEDIA:** Use extinguishing material suitable to the surrounding fire, including halon, carbon dioxide, dry chemical and ABC class.

**UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

**SPECIAL HAZARDS ARISING FROM THE SUBSTANCE:** When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., oxides of silicon and carbon).

Explosion Sensitivity to Mechanical Impact: Not applicable.

Explosion Sensitivity to Static Discharge: Not applicable.

**SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS:** Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES:** Proper protective equipment should be used. In the event of a spill, clear the area and protect people. Eliminate all sources of ignition before cleanup begins. Use non-sparking tools. The atmosphere must have levels of components lower than those listed in Section 8, (Exposure Controls and Personal Protective Equipment) if applicable, and have at least 19.5 percent oxygen before personnel can be allowed into the area without Self-Contained Breathing Apparatus (SCBA).

**PERSONAL PROTECTIVE EQUIPMENT:** Use proper protective equipment and non-sparking tools and equipment.

**Small Spills:** Wear rubber gloves, splash goggles, and appropriate body protection.

**METHODS FOR CLEAN-UP AND CONTAINMENT:** Avoid allowing contact with water on spilled substance or inside containers.

**Small Spills:** Absorb spilled material with polypads or other suitable, non-reacting sorbent, avoiding generation of aerosols, wearing gloves, goggles and apron. Place spilled material in appropriate container for disposal, sealing tightly. Remove all residue before decontamination of spill area.

**Large Spills:** Access to the spill area should be restricted. Spread should be limited by diking spill area. Absorb spilled liquid with polypads or other suitable absorbent materials.

**All Spills:** Place all spill residue in a double plastic bag or other containment and seal. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

**ENVIRONMENTAL PRECAUTIONS:** Avoid release to the environment. Run-off water may be contaminated by other materials and should be contained to prevent possible environmental damage.

**REFERENCE TO OTHER SECTIONS:** See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

## 7. HANDLING and STORAGE

### TECHNICAL MEASURES:

See Ventilation and Engineering Controls in Section 8.

### PRECAUTIONS FOR SAFE HANDLING:

All employees who handle this material should be trained to handle it safely. Keep container tightly closed when not in use. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors or mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

### CONDITIONS FOR SAFE STORAGE:

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored away from incompatible materials (See Section 10.) Material should be stored in secondary containers or in a diked area, as appropriate. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Storage areas should be made of fire resistant materials. Have appropriate extinguishing equipment in the storage area (such as sprinkler systems or portable fire extinguishers). Empty containers may contain residual product; therefore, empty containers should be handled with care.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

### EXPOSURE LIMITS:

#### OCCUPATIONAL/WORKPLACE EXPOSURE LIMITS/GUIDELINES:

| CHEMICAL NAME                               | CAS #      | EXPOSURE LIMITS IN AIR   |                           |                          |                                 |                          |                           |                                  |   |
|---|------------|--------------------------|---------------------------|--------------------------|---------------------------------|--------------------------|---------------------------|----------------------------------|---|
|   |            | ACGIH-TLVS               |                           | US OSHA-PELS             |                                 | NIOSH-RELS               |                           | NIOSH                            | OTHER   |
|   |            | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup> | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup>       | TWA<br>mg/m <sup>3</sup> | STEL<br>mg/m <sup>3</sup> | IDLH<br>mg/m <sup>3</sup>        |   |
| Isopropyl Alcohol                           | 67-63-0    | 200                      | 400                       | 400                      | 500<br>(vacated<br>1989<br>PEL) | 400                      | 500                       | 2000 (based<br>on 10% of<br>LEL) | Canada (ON, AB, SK) OEL<br>TWA= 200ppm, STEL =<br>400ppm<br>Canada (QB, YK) OEL TWA/EV<br>= 400ppm, STEL/V = 500ppm |
| Dimethylpolysiloxane                        | 63148-62-9 | NE                       | NE                        | NE                       | NE                              | NE                       | NE                        | NE                               | NE  |
| Polydimethylsiloxane, Silanol<br>Terminated | 70131-67-8 | NE                       | NE                        | NE                       | NE                              | NE                       | NE                        | NE                               | NE  |

NE = Not Established. See Section 16 for definitions.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION, Continued

### CONTROL PARAMETERS:

**BIOLOGICAL EXPOSURE INDICES:** Currently, there are ACGIH Biological Exposure Indices (BEIs) determined for the components of this product, as follows:

| CHEMICAL:<br>DETERMINANT          | SAMPLING TIME                  | BEI       |
|-----------------------------------|--------------------------------|-----------|
| Isopropanol<br>• Acetone in urine | • End of Shift End of Workweek | • 40 mg/L |

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation. Use a mechanical fan or vent area to outside. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits provided in this section, if applicable. Use a non-sparking, grounded, explosion-proof ventilation system separate from other exhaust ventilation systems. Exhaust system in manner consistent with prevention of release to atmosphere. An eyewash and safety shower should be readily accessible.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Refer to Sections 6, 7 and 13 for information on controlling exposure to this product to the environment.

**PROTECTIVE EQUIPMENT:** The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including U.S. Federal OSHA Respiratory Protection (29 CFR 1910.134), OSHA Eye Protection 29 CFR 1910.133, OSHA Hard Protection 29 CFR 1910.138, OSHA Foot Protection 29 CFR 1910.136 and OSHA Body Protection 29 CFR 1910.132), or equivalent standards of Canada (including CSA Respiratory Standard Z94.4-02, Z94.3-M1982, *Industrial Eye and Face Protectors* and CSA Standard Z195-02, *Protective Footwear*). Please reference applicable regulations and standards for relevant details.

**RESPIRATORY PROTECTION:** Maintain the Oxygen level above 19.5% in the workplace and exposure limits below levels given earlier in this section, if applicable. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard. If necessary, use only respiratory protection authorized in appropriate regulations to assist in equipment selection.

**EYE PROTECTION:** Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations to assist in equipment selection.

**HAND PROTECTION:** Wear butyl rubber, Teflon™, Barricade™, Chemrel™, nitrile or similar gloves for routine industrial use. If necessary, refer to applicable regulations and standards.

**BODY PROTECTION:** Use body protection appropriate for task. If necessary, refer to appropriate regulations to assist in equipment selection.

**HYGIENE:** See Section 7.

## 9. PHYSICAL and CHEMICAL PROPERTIES

**PHYSICAL STATE:** Thin liquid.

**COLOR:** Translucent, milky.

**MOLECULAR FORMULA:** Mixture.

**MOLECULAR WEIGHT:** Mixture.

**ODOR:** Faint.

**ODOR THRESHOLD:** Not established.

**pH:** Not established.

**MELTING/FREEZING POINT:** Not established.

**BOILING POINT:** Not established.

## 9. PHYSICAL and CHEMICAL PROPERTIES, continued

FLASH POINT (Pensky-Martens Closed Tester): >93.3°C (200°F).

EVAPORATION RATE (nBuAc = 1): Not established; based on ingredients the comparative evaporation rate is expected to be <1.

FLAMMABLE LIMITS (in air by volume, %): Not established.

VAPOR PRESSURE, mm Hg @ 50°C: Not established.

RELATIVE VAPOR DENSITY (air = 1): Not established; based on ingredients the relative vapor density is expected to be >1.

SPECIFIC GRAVITY (23°C, water = 1): 1.01

SOLUBILITY: Soluble in water.

COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not established.

AUTOIGNITION TEMPERATURE: Not established.

VISCOSITY (cP): Not established.

VOLATILE ORGANIC COMPOUND CONTENT: 4.32g/L

## 10. STABILITY and REACTIVITY

REACTIVITY: Not considered a reactivity hazard.

CHEMICAL STABILITY: Stable under typical, environmental conditions in a workplace in the absence of contaminants.

DECOMPOSITION PRODUCTS: Combustion: Silicon, nitrogen and carbon oxides. Hydrolysis: None known.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizers, water-reactive materials.

POSSIBILITY OF HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Exposure to incompatible chemicals, high temperatures.

## 11. TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY: Not Classified.

Data for Isopropyl Alcohol:

LD<sub>50</sub> (Oral-Rat) 5045 mg/kg

LD<sub>50</sub> (Skin-Rabbit) 12,800 mg/kg

LDLo (unreported, man) = 2770 mg/kg

TDLo (oral, man) = 14,432 mg/kg; Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: dyspnea

TDLo (oral, human) = 223 mg/kg; Behavioral: hallucinations, distorted perceptions; Cardiac: pulse rate; Vascular: BP lowering not characterized in autonomic section TDLo (oral, infant) = 13 gm/kg; Behavioral: somnolence (general depressed activity), irritability; Gastrointestinal: nausea or vomiting

LDLo (oral, man) = 5272 mg/kg; Behavioral: coma; Vascular: BP lowering not characterized in autonomic section; Lungs, Thorax, or Respiration: chronic pulmonary edema

LDLo (oral, human) = 3570 mg/kg; Behavioral: coma; Lungs, Thorax, or Respiration: respiratory depression; Gastrointestinal: nausea or vomiting

SKIN CORROSION/IRRITATION: Not Classified.

Data for Isopropyl Alcohol:

Skin Irritancy (rabbit) = 500 mg; mild

## 11. TOXICOLOGICAL INFORMATION, continued

|  |                 |
|--|-----------------|
| SERIOUS EYE DAMAGE/IRRITATION:   | Not Classified. |
| Data for Isopropyl Alcohol:<br>Eye Irritancy (rabbit) = 100 mg; severe<br>Eye Irritancy (rabbit) = 10 mg; moderate   |                 |
| RESPIRATORY or SKIN SENSITIZATION:   | Not Classified. |
| GERM CELL MUTAGENICITY:  | Not Classified. |
| CARCINOGENICITY:   | Not Classified. |
| <b>ISOPROPYL ALCOHOL:</b> ACGIH-TLV-A Compound (Not Classifiable as a Human Carcinogen); IARC-3 Compound (Not Classifiable as to Carcinogenicity to Humans)  |                 |
| REPRODUCTIVE TOXICITY:   | Not Classified. |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE):  | Not Classified. |
| Data for Isopropyl Alcohol:<br>TDLo (oral, rat) = 6480 mg/kg/male 26 weeks pre; Reproductive effects<br>TCLo (inhalation, rat) = 10,000 ppm/7 hours/female 1–19 days post; Teratogenic effects   |                 |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE):  | Not Classified. |
| SYMPTOMS/EFFECTS AFTER INHALATION: Inhalation is not anticipated to be a significant route of exposure to this product. If mists or sprays of this product are inhaled, they may mildly irritate the nose and other tissues of the upper respiratory system. Symptoms are generally alleviated upon breathing fresh air.     |                 |
| SYMPTOMS/EFFECTS AFTER EYE OR SKIN CONTACT: Depending on the duration and concentration of exposure, eye contact may cause tearing and redness. Skin contact may cause mild redness, discomfort, and irritation. Symptoms are generally alleviated upon rinsing. Repeated skin contact may cause dermatitis (dry, red skin). |                 |
| SYMPTOMS/EFFECTS AFTER INGESTION: Ingestion is not anticipated to be a likely route of exposure to this product. If this material is swallowed, it may cause headache, nausea, and vomiting.   |                 |
| SYMPTOMS/EFFECTS AFTER SKIN ABSORPTION: Although the Isopropyl Alcohol component of this product can be absorbed through intact skin, skin absorption is not anticipated to cause adverse effects.   |                 |

## 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**ECOTOXICITY:** This product has not been tested for ecotoxicity. Aquatic toxicity data for components of this product are provided as follows:

### ISOPROPYL ALCOHOL:

Toxic (*Chlorella pyrenoidosa* algae) = 17,400 mg/L  
NOEC (*Daphnia magna*) reproduction = 2,100 mg/L  
NOEC (*Daphnia magna*) growth = 757 mg/L  
EC<sub>0</sub> (*Pseudomonas putida*, bacteria) 16 hours = 1,050 mg/L  
EC<sub>0</sub> (*Microcystis aeruginosa*, algae) 8 days = 1,000 mg/L  
EC<sub>0</sub> (*Scenedesmus quadricauda*, green algae) 7 days = 1,800 mg/L  
EC<sub>50</sub> (*Daphnia magna*) reproduction = 3,010 mg/L  
EC<sub>0</sub> (*Uronema parduczi* Chatton-Lwoff, protozoa) = 3,425 mg/L  
LC<sub>0</sub> (*Semolilus atromaculatus*, creek chub) 24 hours = 900 mg/L

### ISOPROPYL ALCOHOL (continued):

EC<sub>50</sub> (*Entosiphon sulcatum*, protozoa) 72 hours = 4,930 mg/L  
EC<sub>50</sub> Microtox™ (*Photobacterium*) test 5 minutes = 22,800 mg/L  
LC<sub>50</sub> Streptoxkit F (*Streptocephalus proboscideus*) test 24 hours = 11,600 mg/L  
LC<sub>50</sub> (*Daphnia magna*) test 24 hours = 9500 mg/L  
LC<sub>50</sub> Rotoxkit F (*Brachionus calyciflorus*) test 24 hours = 28,600 mg/L  
LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 48 hours = (average) 1,400 mg/L  
LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 48 hours = (range) 900-1,950 mg/L

### ISOPROPYL ALCOHOL (continued):

LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 98 hours = (average) 1,150 mg/L  
LC<sub>50</sub> (*Crangon crangon*, brown shrimp) 98 hours = (range) 750-1,650 mg/L  
LC<sub>50</sub> (*Daphnia magna*) = 4,600 mg/L  
LC<sub>50</sub> (*Crassus auratus*, goldfish) 24 hours = > 500 mg/L  
LC<sub>50</sub> (*Pimephales promelas*, fathead minnow) 1; 24; 48; 72 and 96 hours = 11,830; 11,160; 11,130; 11,130; 11,130 mg/L  
LC<sub>50</sub> (*Poecilia reticulata*, guppy) 7 days = 7,060 mg/L  
LC<sub>100</sub> (creek chub) 24 hours = 1,100 mg/L

## 12. ECOLOGICAL INFORMATION, continued

**PERSISTENCE AND BIODEGRADABILITY:** The product has not been tested for persistence or biodegradability. The components of this product are relatively stable under ambient environmental conditions. Additional environmental data for components of this product are available as follows:

**DIMETHYLPOLYSILOXANE:**

Water Solubility: Insoluble.

Terrestrial Fate: If released to soil, Dimethyl Siloxane will absorb strongly and will remain essentially immobile. Dimethyl Siloxane will not volatilize to the atmosphere, nor will it biodegrade. Dimethyl Siloxane will not undergo hydrolysis except in clay soils which are known to catalyze this reaction at a rate dependent upon the amount of water present.

Aquatic Fate: If released to an aquatic environment, Dimethyl Siloxane is expected to absorb strongly to sediment and suspended organic matter. Although insoluble in water, Dimethyl Siloxane is not expected to bioconcentrate, due to its inherent hydrophobicity. Dimethyl Siloxane will not bioconcentrate in fish and aquatic environments as this compound is molecularly too large to pass through biological membranes and concentrate in fatty tissue. Dimethyl Siloxane will hydrolyze in water and will not volatilize to the atmosphere.

Atmospheric Fate: If released to the atmosphere, Dimethyl Siloxane will only enter the atmosphere if in aerosol form, due to its heavy molecular weight, very low vapor pressure and liquid physical state. The most likely atmospheric fate process is by dry deposition to the surface of the earth.

**ISOPROPYL ALCOHOL:**

Octanol/Water Partition Coefficient:  $\log P = 0.34-0.5$

Persistence: If released to the soil, Isopropanol will both rapidly evaporate and leach into the ground due to high vapor pressure and low adsorption to soil. If released to water, Isopropanol will volatilize, with an estimated half-life of 5.4 days. If released to the atmosphere, Isopropanol will photodegrade, with an estimated half-life of one to several days. Due to the solubility of Isopropanol in water, rainout may be significant.

Biodegradation: In soil, and water, degradation of Isopropanol has not been determined. If soil degradation is not rapid, it will likely leach to groundwater.

**BIO-ACCUMULATION POTENTIAL:** This product has not been tested for bio-accumulation potential.

**MOBILITY:** This product has not been tested for mobility in soil.

**OTHER ADVERSE EFFECTS:** No components of this product are listed as having ozone depletion potential.

**ENVIRONMENTAL EXPOSURE CONTROLS:** Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:** It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

**DISPOSAL CONTAINERS:** Waste materials must be placed in and shipped in impermeable containers. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

**PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING:** Wear proper protective equipment when handling waste materials.

**U.S. EPA WASTE NUMBER:** Not applicable.

## 14. TRANSPORTATION INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS:** This product is NOT classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

**TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:** This product is NOT considered as Dangerous Goods, per regulations of Transport Canada.

**INTERNATIONAL AIR TRANSPORT ASSOCIATION DESIGNATION:** This material is NOT considered as dangerous goods, per rules of IATA.

**INTERNATIONAL MARITIME ORGANIZATION (IMO):** This product is NOT considered as dangerous goods, per rules of the IMO.

**TRANSPORT IN BULK ACCORDING TO THE IBC CODE:** Not applicable.

**ENVIRONMENTAL HAZARDS:** This product does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN); components are not specifically listed in Annex III under MARPOL 73/78.

## 15. REGULATORY INFORMATION

### ADDITIONAL U.S. REGULATIONS:

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

| CHEMICAL NAME                                  | SARA 302<br>(40 CFR 355, Appendix A) | SARA 304<br>(40 CFR Table 302.4) | SARA 313<br>(40 CFR 372.65) |
|--|--------------------------------------|----------------------------------|-----------------------------|
| Isopropyl Alcohol<br>(mfg-strong acid process) | No                                   | No                               | Yes                         |

**U.S. SARA THRESHOLD PLANNING QUANTITY:** No Threshold Planning Quantities for this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** There are no specific reportable quantities for this product or its components.

**U.S. TSCA INVENTORY STATUS:** The components of this product are listed on the TSCA Inventory.

### STATE REGULATIONS:

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** No component of this product is on the California Proposition 65 lists.

### ADDITIONAL CANADIAN REGULATIONS:

**CANADIAN DSL/NDL INVENTORY:** The components of this product are listed on the DSL Inventory.

**CANADIAN ENVIRONMENTAL PROTECTION AGENCY (CEPA) PRIORITY SUBSTANCES LISTS:** Not applicable.

## 16. OTHER INFORMATION

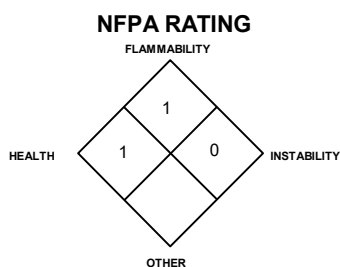
**PREPARED BY:** CHEMICAL SAFETY ASSOCIATES, Inc. • PO Box 1961, Hilo, HI 96721 (800) 969-4846  
NOVUS 2 LLC CHEMISTRY DEPARTMENT • 650 Pelham Boulevard, Suite 100 • St Paul, MN 55114 (952) 944-8000

**REFERENCES AND DATA SOURCES:** Contact the supplier for information.



**METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION:** Bridging principles were used to classify this product.

### REVISION DETAILS:

April 2012: Review and update entire SDS to comply with EU CLP 1272: 2008 and GHS.  
October 2012: Review and update to comply with OSHA's revised Hazard Communication Standard.  
October 2015: Review and update as necessary.  
March 2017: Review and update to particulars of Canada's HPR.  
July 2017: Review and update Canadian distributor, formatting.  
August 2018: Added VOC Content information to Section 9.  
April 2019: Updated company name; new formula  
July 2020: Update Section 8  
October 2020: Update Sections 2 and 11 with new hazard information.



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe

| HAZARDOUS MATERIAL IDENTIFICATION SYSTEM  |               |   |               |
|---|---------------|---|---------------|
| <b>HEALTH HAZARD</b>  | (BLUE)        | 1   |               |
| <b>FLAMMABILITY HAZARD</b>  | (RED)         | 1   |               |
| <b>PHYSICAL HAZARD</b>  | (YELLOW)      | 0   |               |
| PROTECTIVE EQUIPMENT  |               |   |               |
| EYES  | RESPIRATORY   | HANDS   | BODY          |
|  | SEE SECTION 8 |  | SEE SECTION 8 |
| For Routine Industrial Use and Handling Applications                                |               |   |               |

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe \* = Chronic hazard

## DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these which are commonly used include the following:

**CAS #:** This is the Chemical Abstract Service Number that uniquely identifies each constituent.

### EXPOSURE LIMITS IN AIR:

**BEI - ACGIH Biological Exposure Indices:** represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

**CEILING LEVEL:** The concentration that shall not be exceeded during any part of the working exposure.

**IDLH-Immediately Dangerous to Life and Health:** This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury.

**LOQ:** Limit of Quantitation.

**MAK:** Federal Republic of Germany Maximum Concentration Values in the workplace.

**NE:** Not Established. When no exposure guidelines are established, an entry of NE is made for reference.

**NIC:** Notice of Intended Change.

**NIOSH CEILING:** The exposure that shall not be exceeded during any part of the workday. If instantaneous monitoring is not feasible, the ceiling shall be assumed as a 15-minute TWA exposure (unless otherwise specified) that shall not be exceeded at any time during a workday.

**NIOSH RELs:** NIOSH's Recommended Exposure Limits.

**PEL-Permissible Exposure Limit:** OSHA's Permissible Exposure Limits. This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL that was vacated by Court Order.

**SKIN:** Used when there is a danger of cutaneous absorption.

**STEL-Short Term Exposure Limit:** Short Term Exposure Limit, usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hr TWA is within the TLV-TWA, PEL-TWA or REL-TWA.

**STEV – Short Term Exposure Value.**

**TLV-Threshold Limit Value:** An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour.

**TWA-Time Weighted Average:** Time Weighted Average exposure concentration for a conventional 8-hr (TLV, PEL) or up to a 10-hr (REL) workday and a 40-hr workweek.

**TWAEV:** Time Weighted Average Exposure Value.

## HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD

**RATINGS:** This rating system was developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

### HEALTH HAZARD:

**0 (Minimal Hazard):** No significant health risk, irritation of skin or eyes not anticipated.

**Skin Irritation:** Essentially non-irritating. PII or Draize = "0". **Eye Irritation:** Essentially non-irritating, or minimal effects which clear in < 24 hours [e.g. mechanical irritation]. Draize = "0". **Oral Toxicity LD<sub>50</sub> Rat:** < 5000 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** < 2000 mg/kg. **Inhalation Toxicity 4-hrs LC<sub>50</sub> Rat:** < 20 mg/L; **1 (Slight Hazard):** Minor reversible injury may occur; slightly or mildly irritating. **Skin Irritation:** Slightly or mildly irritating. **Eye Irritation:** Slightly or mildly irritating. **Oral Toxicity LD<sub>50</sub> Rat:** > 500-5000 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 1000-2000 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 2-20 mg/L; **2 (Moderate Hazard):** Temporary or transitory injury may occur.

**Skin Irritation:** Moderately irritating; primary irritant; sensitizer. PII or Draize > 0, < 5. **Eye Irritation:** Moderately to severely irritating and/or corrosive; reversible corneal opacity; corneal involvement or irritation clearing in 8-21 days. Draize > 0, ≤ 25. **Oral Toxicity LD<sub>50</sub> Rat:** > 50-500 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 200-1000 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 0.5-2 mg/L; **3 (Serious Hazard):** Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity; corrosive. **Skin Irritation:** Severely irritating and/or corrosive; may destroy dermal tissue, cause skin burns, dermal necrosis.

**3 (continued):** PII or Draize > 5-8 with destruction of tissue. **Eye Irritation:** Corrosive, irreversible destruction of ocular tissue; corneal involvement or irritation persisting for more than 21 days. Draize > 80 with effects irreversible in 21 days. **Oral Toxicity LD<sub>50</sub> Rat:** > 1-50 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** > 20-200 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** > 0.05-0.5 mg/L; **4 (Severe Hazard):** Life-threatening; major or permanent damage may result from single or repeated exposure. **Skin Irritation:** Not appropriate. Do not rate as a "4", based on skin irritation alone. **Eye Irritation:** Not appropriate. Do not rate as a "4", based on eye irritation alone. **Oral Toxicity LD<sub>50</sub> Rat:** ≤ 1 mg/kg. **Dermal Toxicity LD<sub>50</sub> Rat or Rabbit:** ≤ 20 mg/kg. **Inhalation Toxicity LC<sub>50</sub> 4-hrs Rat:** ≤ 0.05 mg/L).

### FLAMMABILITY HAZARD:

**0 (Minimal Hazard-Materials that will not burn in air when exposure to a temperature of 815.5°C [1500°F] for a period of 5 minutes.); 1 (Slight Hazard-Materials that must be pre-heated before ignition can occur. Material require considerable pre-heating, under all ambient temperature conditions before ignition and combustion can occur, including: Materials that will burn in air when exposed to a temperature of 815.5°C (1500°F) for a period of 5 minutes or less; Liquids, solids and semisolids having a flash point at or above 93.3°C [200°F] (e.g. OSHA Class IIIB, or; Most ordinary combustible materials [e.g. wood, paper, etc.]; 2 (Moderate Hazard-Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not, under normal conditions, form hazardous atmospheres in air, but under high ambient temperatures or moderate heating may release vapor in sufficient**

quantities to produce hazardous atmospheres in air, including: Liquids having a flash point at or above 37.8°C [100°F]; Solid materials in the form of course dusts that may burn rapidly but that generally do not form explosive atmospheres; Solid materials in a fibrous or shredded form that may burn rapidly and create flash fire hazards (e.g. cotton, sisal, hemp; Solids and semisolids that readily give off flammable vapors.); **3 (Serious Hazard- Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures, or, unaffected by ambient temperature, are readily ignited under almost all conditions, including: Liquids having a flash point below 22.8°C [73°F] and having a boiling point at or above 38°C [100°F] and below 37.8°C [100°F] [e.g. OSHA Class IB and IC]; Materials that on account of their physical form or environmental conditions can form explosive mixtures with air and are readily dispersed in air [e.g., dusts of combustible solids, mists or droplets of flammable liquids]; Materials that burn extremely rapidly, usually by reason of self-contained oxygen [e.g. dry nitrocellulose and many organic peroxides]; 4 (Severe Hazard-Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air, and which will burn readily, including: Flammable gases; Flammable cryogenic materials; Any liquid or gaseous material that is liquid while under pressure and has a flash point below 22.8°C [73°F] and a boiling point below 37.8°C [100°F] [e.g. OSHA Class IA; Material that ignite spontaneously when exposed to air at a temperature of 54.4°C [130°F] or below [e.g. pyrophoric].**

### PHYSICAL HAZARD:

**0 (Water Reactivity):** Materials that do not react with water. **Organic Peroxides:** Materials that are normally stable, even under fire conditions and will not react with water.

**Explosives:** Substances that are Non-Explosive. **Unstable Compressed Gases:** No Rating. **Pyrophorics:** No Rating. **Oxidizers:** No "0" rating allowed. **Unstable Reactives:** Substances that will not polymerize, decompose, condense or self-react; **1 (Water Reactivity):** Materials that change or decompose upon exposure to moisture. **Organic Peroxides:** Materials that are normally stable, but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy. **Explosives:** Division 1.5 & 1.6 substances that are very insensitive explosives or that do not have a mass explosion hazard. **Compressed Gases:** Pressure below OSHA definition. **Pyrophorics:** No Rating. **Oxidizers:** Packaging Group III; **Solids:** any material that in either concentration tested, exhibits a mean burning time less than or equal to the mean burning time of a 3:7 potassium bromate/cellulose mixture and the criteria for Packing Group I and II are not met. **Liquids:** any material that exhibits a mean pressure rise time less than or equal to the pressure rise time of a 1:1 nitric acid (65%)/cellulose mixture and the criteria for Packing Group I and II are not met. **Unstable Reactives:** Substances that may decompose, condense or self-react, but only under conditions of high temperature and/or pressure and have little or no potential to cause significant heat generation or explosive hazard. Substances that readily undergo hazardous polymerization in the absence of inhibitors.); **2 (Water Reactivity):** Materials that may react violently with water. **Organic Peroxides:** Materials that, in themselves, are normally unstable and will readily undergo violent chemical change, but will not detonate. These materials may also react violently with water. **Explosives:** Division 1.4 – Explosive substances where the explosive effect is largely confined to the package and no projection of fragments of appreciable size or range are expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package. **Compressed Gases:** Pressurized and meet OSHA definition but < 514.7 psi absolute at 21.1°C (70°F) [500 psig]. **Pyrophorics:** No Rating. **Oxidizers:** Packing Group II **Solids:** any material that, either in concentration tested, exhibits a mean burning time of less than or equal to the mean burning time of a 2:3 potassium bromate/cellulose mixture and the criteria for Packing Group I are not met. **Liquids:** any material that exhibits a mean pressure rise time less than or equal to the pressure rise of a 1:1 aqueous sodium chlorate solution (40%)/cellulose mixture and the criteria for Packing Group I are not met. **Unstable Reactives:** Substances that may polymerize, decompose, condense, or self-react at ambient temperature and/or pressure, but have a low potential for significant heat generation or explosion. Substances that readily form peroxides upon exposure to air or oxygen at room temperature; **3 (Water Reactivity):** Materials that may form explosive reactions with water. **Organic Peroxides:** Materials that are capable of detonation or explosive reaction, but require a strong initiating source, or must be heated under confinement before initiation; or materials that react explosively with water. **Explosives:** Division 1.2 – Explosive substances that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but do not have a mass explosion hazard. **Compressed Gases:** Pressure ≥ 514.7 psi absolute at 21.1°C (70°F) [500 psig]. **Pyrophorics:** No Rating. **Oxidizers:** Packing Group I **Solids:** any material that, in either concentration tested, exhibits a mean burning time less than the mean burning time of a 3:2 potassium bromate/cellulose mixture. **Oxidizers:** **Liquids:** Any material that spontaneously ignites when mixed with cellulose in a 1:1 ratio, or which exhibits a mean pressure rise time less than the pressure rise time of a 1:1 perchloric acid (50%)/cellulose mixture. **Unstable Reactives:** Substances that may polymerize, decompose, condense or self-react at ambient temperature and/or pressure and have a moderate potential to cause significant heat generation or explosion.); **4 (Water Reactivity):** Materials that react explosively with water without requiring heat or confinement. **Organic Peroxides:** Materials that are readily capable of detonation or explosive decomposition at normal temperature and pressures. **Explosives:** Division 1.1 & 1.2-explosive substances that have a mass explosion hazard or have a projection hazard. A mass explosion is one that affects almost the entire load instantaneously. **Compressed Gases:** No Rating. **Pyrophorics:** Add to the definition of Flammability "4". **Oxidizers:** No "4" rating. **Unstable Reactives:** Substances that may polymerize, decompose, condense or self-react at ambient temperature and/or pressure and have a high potential to cause significant heat generation or explosion).

## DEFINITIONS OF TERMS (Continued)

### NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:

**HEALTH HAZARD: 0** (materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 10,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 200 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 2000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 2000 mg/kg. Materials that are essentially non-irritating to the respiratory tract, eyes and skin. **1** (materials that, under emergency conditions, can cause significant irritation): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 5,000 ppm but less than or equal to 10,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 10 mg/L but less than or equal to 200 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 1000 mg/kg but less than or equal to 2000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 500 mg/kg but less than or equal to 2000 mg/kg. Materials that cause slight to moderate irritation to the respiratory tract, eyes and skin. **2** (materials that, under emergency conditions, can cause temporary incapacitation or residual injury): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 3,000 ppm but less than or equal to 5,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 2 mg/L but less than or equal to 10 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 200 mg/kg but less than or equal to 1000 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 5000 ppm and that does not meet the criteria for either degree of hazard 3 or degree of hazard 4. Compressed liquefied gases with boiling points between -30°C (-22°F) and -55°C (-66.5°F) that cause severe tissue damage, depending on duration of exposure. Materials that are respiratory irritants. Materials that cause severe, but reversible irritation to the eyes or are lachrymators. Materials that are primary skin irritants or sensitizers. **3** (materials that, under emergency conditions, can cause serious or permanent injury): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity is greater than 1,000 ppm but less than or equal to 3,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is greater than 0.5 mg/L but less than or equal to 2 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is greater than 5 mg/kg but less than or equal to 50 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 3000 ppm and that does not meet the criteria for degree of hazard 4. Compressed liquefied gases with boiling points between -30°C (-22°F) and -55°C (-66.5°F) that cause frostbite and irreversible tissue damage. Materials that are respiratory irritants. Cryogenic gases that cause frostbite and irreversible tissue damage. Materials that are corrosive to the respiratory tract. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials that are corrosive to the skin. **4** (materials that, under emergency conditions, can be lethal): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity less than or equal to 1,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is less than or equal to 0.5 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is less than or equal to 40 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is less than or equal to 5 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 1000 ppm. **4** (materials that, under emergency conditions, can be lethal): Gases and vapors whose LC<sub>50</sub> for acute inhalation toxicity less than or equal to 1,000 ppm. Dusts and mists whose LC<sub>50</sub> for acute inhalation toxicity is less than or equal to 0.5 mg/L. Materials whose LD<sub>50</sub> for acute dermal toxicity is less than or equal to 40 mg/kg. Materials whose LD<sub>50</sub> for acute oral toxicity is less than or equal to 5 mg/kg. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LC<sub>50</sub> for acute inhalation toxicity, if its LC<sub>50</sub> is less than or equal to 1000 ppm.

**FLAMMABILITY HAZARD: 0** Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand: Materials that will not burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with Annex D. **1** Materials that must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur: Materials that will burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with Annex D. Liquids, solids and semisolids having a flash point at or above 93.4°C (200°F) (i.e. Class IIIB liquids). Liquids with a flash point greater than 35°C (95°F) that do not sustain combustion when tested using the *Method of Testing for Sustained Combustibility*, per 49 CFR 173, Appendix H or the UN *Recommendation on the Transport of Dangerous Goods, Model Regulations* (current edition) and the related *Manual of Tests and Criteria* (current edition). Liquids with a flash point greater than 35°C (95°F) in a water-miscible solution or dispersion with a water non-combustible liquid/solid content of more than 85 percent by weight. Liquids that have no fire point when tested by ASTM D 92 Standard Test Method for Flash and Fire Points by Cleveland Open Cup, up to a boiling point of the liquid or up to a temperature at which the sample being tested shows an obvious physical change. Combustible pellets with a representative diameter of greater than 2 mm (10 mesh). Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed up flash point of the solvent. Most ordinary combustible materials. **2** Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not under normal conditions form hazardous atmospheres with air, but under high ambient temperatures or under

moderate heating could release vapor in sufficient quantities to produce hazardous atmospheres with air: Liquids having a flash point at or above 37.8°C (100°F) and below 93.4°C (200°F) (i.e. Class II and Class IIIA liquids.) Solid materials in the form of powders or coarse dusts of representative diameter between 420 microns (40 mesh) and 2 mm (10 mesh) that burn rapidly but that generally do not form explosive mixtures in air. Solid materials in fibrous or shredded form that burn rapidly and create flash fire hazards, such as cotton, sisal and hemp. Solids and semisolids that readily give off flammable vapors. Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **3** Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures or, though unaffected by ambient temperatures, are readily ignited under almost all conditions: Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 37.8°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (73°F) and below 37.8°C (100°F) (i.e. Class IB and IC liquids). Materials that, on account of their physical form or environmental conditions, can form explosive mixtures with air and are readily dispersed in air. Flammable or combustible dusts with a representative diameter less than 420 microns (40 mesh). Materials that burn with extreme rapidity, usually by reason of self-contained oxygen (e.g. dry nitrocellulose and many organic peroxides). Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **4** Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily: Flammable gases. Flammable cryogenic materials. Any liquid or gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IA liquids). Materials that ignite when exposed to air, Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. **INSTABILITY HAZARD: 0** Materials that in themselves are normally stable, even under fire conditions: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. **1** Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. **2** Materials that readily undergo violent chemical change at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. **3** Materials that in themselves are capable of detonation or explosive decomposition or explosive reaction, but that require a strong initiating source or that must be heated under confinement before initiation: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 100 W/mL and below 1000 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. **4** Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater. Materials that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures.

### FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the **National Fire Protection Association (NFPA)**. **Flash Point** - Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air. **Autoignition Temperature**: The minimum temperature required to initiate combustion in air with no other source of ignition. **LEL** - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. **UEL** - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

### TOXICOLOGICAL INFORMATION:

**Human and Animal Toxicology:** Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: **LD<sub>50</sub>** - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; **LC<sub>50</sub>** - Lethal Concentration (gases) which kills 50% of the exposed animals; **ppm** concentration expressed in parts of material per million parts of air or water; **mg/m<sup>3</sup>** concentration expressed in weight of substance per volume of air; **mg/kg** quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include **TDLo**, the lowest dose to cause a symptom and **TCLo** the lowest concentration to cause a symptom; **TD<sub>0</sub>**, **LDLo**, and **LD<sub>0</sub>**, or **TC**, **TC<sub>0</sub>**, **LCLo**, and **LC<sub>0</sub>**, the lowest dose (or concentration) to cause lethal or toxic effects. **Cancer Information:** The sources are: **IARC** - the International Agency for Research on Cancer; **NTP** - the National Toxicology Program, **RTECS** - the Registry of Toxic Effects of Chemical Substances, **OSHA** and **CAL/OSHA**. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used.

**Other Information:** **BEI** - ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

## DEFINITIONS OF TERMS (Continued)

### ECOLOGICAL INFORMATION:

EC is the effect concentration in water. **BCF** = Bioconcentration Factor, which is used to determine if a substance will concentrate in lifeforms which consume contaminated plant or animal matter. **TL<sub>m</sub>** = median threshold limit; Coefficient of Oil/Water Distribution is represented by **log K<sub>ow</sub>** or **log K<sub>oc</sub>** and is used to assess a substance's behavior in the environment.

### REGULATORY INFORMATION:

**U.S. and CANADA:** **ACGIH:** American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. This section explains the impact of various laws and regulations on the material. **EPA** is the U.S.

Environmental Protection Agency. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (**OSHA**). **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively. Superfund Amendments and Reauthorization Act (**SARA**); the Canadian Domestic/Non-Domestic Substances List (**DSL/NDSL**); the U.S. Toxic Substance Control Act (**TSCA**); Marine Pollutant status according to the **DOT**; the Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA or Superfund**); and various state regulations. This section also includes information on the precautionary warnings which appear on the material's package label. **OSHA** - U.S. Occupational Safety and Health Administration.



# MATERIAL SAFETY DATA SHEET

## SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|   |  |  |                                   |                                  |
|---|--|--|-----------------------------------|----------------------------------|
| <u>Company Name</u><br>Nu-Calgon Wholesaler, Inc. | <u>Phone Number</u><br>(314) 469-7000 / (800) 554-5499 |  | <u>CHEMTREC</u><br>(800) 424-9300 |                                  |
| <u>Street Address</u><br>2008 Altom Court         | <u>City</u><br>St. Louis                               | <u>State</u><br>MO                           | <u>Postal Code</u><br>63146-4151  | <u>Last Update</u><br>10/25/12   |
| <u>Product Name</u><br>Nu-blast, Aerosol          | <u>Product Number</u><br>4290-75                       | <u>Product Use</u><br>Condenser Coil Cleaner |                                   | <u>EPA Registration #</u><br>N/A |

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

| <b>Hazardous Ingredients</b> | <b>% By Wt.</b> | <b>CAS Number</b> | <b>TLV</b> | <b>PEL</b> |
|------------------------------|-----------------|-------------------|------------|------------|
| Trichloroethylene            | 90 - 98         | 79-01-6           | 50 ppm     | 50 ppm     |
| Carbon dioxide               | < 5             | 124-38-9          | 5000 ppm   | 5000 ppm   |
|                              |                 |                   |            |            |

## SECTION 3 – HAZARD IDENTIFICATION

**Emergency Overview:** Warning. Ensure adequate ventilation. Avoid breathing vapors or mists. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C). Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material KEEP OUT OF REACH OF CHILDREN

### Potential Health Effects

**Eyes:** Irritating to eyes.

**Skin:** Irritating to skin. Prolonged skin contact may defat the skin and produce dermatitis.

**Ingestion:** Aspiration may cause pulmonary oedema and pneumonitis. nausea.

**Inhalation:** Inhalation of high vapour concentrations may cause nasal & respiratory irritation and symptoms like headache, dizziness, tiredness, nausea, vomiting and possible unconsciousness.

**Chronic Exposure:** Prolonged exposure may cause chronic effects such as. Liver disorders. Kidney disorders. Lung damage. cardiac irregularities. Repeated and prolonged exposure to solvents may cause brain and nervous system damage. May cause disorder and damage to the spleen. In chronic inhalation tests with rats and mice, Trichloroethylene caused an increased incidence of tumours of a type which is routinely observed in these species.

**Carcinogenicity:** CA Prop 65 carcinogen - Trichloroethylene

**Medical Conditions Aggravated by Exposure:** May aggravate existing eye, skin, or upper respiratory conditions

## SECTION 4 – FIRST AID MEASURES

**Eyes:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist

**Skin:** Wash off with soap and water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician

**Ingestion:** DO NOT INDUCE VOMITING. Aspiration hazard. Clean mouth with water and afterwards drink plenty of water. Immediate medical attention is required

**Inhalation:** Move to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth. Obtain medical attention

## SECTION 5 – FIREFIGHTING MEASURES

**Flash Point:** No Data. °F

**Autoignition Temp:** No Data. °C/No Data. °F

**Hazardous Products of Combustion:** Carbon oxides, Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts).

**Flammable Limits in Air:** No Data.

**Extinguishing Media:** Foamy spray. Dry chemical. Carbon dioxide (CO2).

**Fire and Explosion Hazards:** Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C).

**Special Firefighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill or Leak:** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of in accordance with local regulations.

## SECTION 7 – HANDLING AND STORAGE

**Handling Procedures and Equipment:** Wear personal protective equipment. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material.

**Storage Requirements:** KEEP OUT OF REACH OF CHILDREN. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F (50°C).

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory Protection:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Eye Protection:** Safety glasses with side-shields.

**Protective Clothing:** Neoprene gloves

**Exposure Guidelines:** See Section 2

**Specific Engineering Controls (such as ventilation, enclosed process):** Ensure adequate ventilation, especially in confined areas

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|   |  |  |
|---|--|--|
| <b>Physical Form:</b> Aerosol               | <b>Freezing Point:</b> No Data.°C/No Data.°F           | <b>% Volatile by Weight:</b> 96.5 %                                    |
| <b>Color:</b> Clear                         | <b>Vapor Density [air =1]:</b> No Data.                | <b>Evaporation Rate:</b> 2.1 (concentrate only) ( n-butyl acetate = 1) |
| <b>Odor:</b> Ethereal                       | <b>Vapor Pressure:</b> PSIG @ 70°F (Aerosols): 85-100. | <b>Specific Gravity:</b> 1.45  |
| <b>Boiling Point:</b> No Data.°C/No Data.°F | <b>Solubility in Water:</b> Insoluble.                 | <b>pH (concentrate):</b> No Data.                                      |

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Hazardous Polymerization:** Hazardous polymerization does not occur

**Incompatibilities:** Reactive metals. Magnesium. Strong oxidizing agents. Product may react with aluminum if immersed in liquid concentrate trichloroethylene for extended periods.

**Reactive Conditions to avoid:** Heat, flames and sparks. Extremes of temperature and direct sunlight. Do not expose to temperatures above 54°C .

**Decomposition Products:** Carbon oxides , Hydrogen chloride (trace amounts), Phosgene (trace amounts) or Chlorine (trace amounts)

## SECTION 11 – TOXICOLOGICAL INFORMATION

| <u>Hazardous Ingredients</u> | <u>CAS #</u> | <u>EINECS #</u> | <u>LD 50 of Ingredient</u><br>(Specify Species)            | <u>LC50 of Ingredient</u><br>(Specify Species) |
|------------------------------|--------------|-----------------|--|--|
| Trichloroethylene            | 79-01-6      | N/D             | Oral LD50 Rat: 5650 mg/kg;<br>Dermal LD50 Rabbit: >20 g/kg | Inhalation LC50 Mouse: 8450 ppm/4H;            |
| Carbon dioxide               | 124-38-9     | N/D             | No Data.   | No Data.                                       |
|                              |              |                 |  |  |
|                              |              |                 |  |  |

## SECTION 12 – ECOLOGICAL INFORMATION

| <u>Hazardous Ingredients</u> | <u>Aquatic Toxicity Data</u>                        |
|------------------------------|---|
| Trichloroethylene            | 96 Hr LC50 fathead minnow: 44.1 mg/L (flow-through) |
| Carbon dioxide               | No Data.  |
|                              |   |
|                              |   |

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal:** Should not be released into the environment. Dispose of in accordance with local regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

**Special Shipping Information:** No Data.

| <u>Purview</u>        | <u>Proper Shipping Name</u> | <u>UN Number</u> | <u>Packing Group</u> | <u>Hazard Class</u> |
|-----------------------|-----------------------------|------------------|----------------------|---------------------|
| <b>DOT</b><br>(Land)  | Consumer Commodity ORM-D    | No Data.         | No Data.             | No Data.            |
| <b>IMO</b><br>(Water) | No Data.                    | No Data.         | No Data.             | No Data.            |
| <b>ICAO</b><br>(Air)  | Aerosols, Non-Flammable     | UN1950           | No Data.             | 2.2                 |

## SECTION 15 – REGULATORY INFORMATION

|  |   |
|--|---|
| <b>WHMIS Classification:</b> (Workplace Hazardous Material Information System)     | D1B, D2A, D2B   |
| <b>SARA Title III:</b> (Superfund Amendments & Reauthorization Act)                | Yes - Trichloroethylene   |
| <b>OSHA:</b> (Occupational Safety & Health Administration)                         | See Section 2   |
| <b>TSCA:</b> (Toxic Substance Control Act)   | Present   |
| <b>VOC:</b> (volatile Organic Compounds)   | 96.5 %  |
| <b>CPR:</b> (Canadian Controlled Products Regulations)                             | This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. |
| <b>EINECS:</b> (European Inventory of Existing Commercial Chemical Substances)     | No Data.  |
| <b>DSL / NDSL:</b> (Canadian Domestic Substance List)(Non-Domestic Substance List) | Present   |
| <b>CERCLA:</b> (Comprehensive Response Compensation & Liability Act)               | Trichloroethylene - 100 lb RQ   |
| <b>IDL:</b> (Canadian Ingredient Disclosure List)                                  | No Data.  |
| <b>NFPA (HMIS) Rating:</b> (Hazardous Materials Identification System)             | Health=2; Fire=0; Reactivity=0<br>Personal protective equipment = B   |

## SECTION 16 – OTHER INFORMATION

No Data.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.



# SAFETY DATA SHEET

Revision Date 26-Jan-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 3H AVIATION FORM-A-GASKET #3 SEALANT .25PT

### Other means of identification

**Product Code** 80019

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                       |             |
|-----------------------|-------------|
| Acute toxicity - Oral | Category 3  |
| Skin sensitization    | Category 1  |
| Carcinogenicity       | Category 1A |
| Flammable liquids     | Category 2  |

### Label elements

#### **Emergency Overview**

#### **Danger**

Toxic if swallowed  
May cause an allergic skin reaction  
May cause cancer  
Highly flammable liquid and vapor



**Appearance** Dark brown

**Physical state** Liquid

**Odor** Alcohol

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves  
Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting/equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see supplemental first aid instructions on this label)  
If skin irritation or rash occurs: Get medical advice/attention  
Wash contaminated clothing before reuse  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Harmful to aquatic life with long lasting effects

Unknown acute toxicity

54.89515% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

| Chemical Name | CAS No     | Weight-% | Trade Secret |
|---------------|------------|----------|--------------|
| VEGETABLE OIL | 68187-84-8 | 15 - 40  | *            |
| ROSIN         | 8050-09-7  | 10 - 30  | *            |
| TALC          | 14807-96-6 | 10 - 30  | *            |

|                        |          |         |   |
|------------------------|----------|---------|---|
| ETHANOL                | 64-17-5  | 10 - 30 | * |
| 2-PROPANOL             | 67-63-0  | 1 - 5   | * |
| METHYL ISOBUTYL KETONE | 108-10-1 | 0.1 - 1 | * |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Get medical advice/attention if you feel unwell.   |
| <b>Eye contact</b>                        | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Skin contact</b>                       | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Wash contaminated clothing before reuse.     |
| <b>Inhalation</b>                         | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.   |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.  |

##### Most important symptoms and effects, both acute and delayed

**Symptoms** See section 2 for more information.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide (CO2), Dry chemical, Foam

##### Unsuitable extinguishing media

None.

##### Specific hazards arising from the chemical

Highly flammable.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

| Chemical Name                      | ACGIH TLV  | OSHA PEL  | NIOSH IDLH   |
|------------------------------------|--|---|--|
| ROSIN<br>8050-09-7                 | -  | (vacated) TWA: 0.1 mg/m <sup>3</sup><br>Formaldehyde  | TWA: 0.1 mg/m <sup>3</sup> Formaldehyde  |
| TALC<br>14807-96-6                 | TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable fraction | (vacated) TWA: 2 mg/m <sup>3</sup> respirable dust <1% Crystalline silica, containing no Asbestos<br>TWA: 20 mppcf if 1% Quartz or more, use Quartz limit                         | IDLH: 1000 mg/m <sup>3</sup><br>TWA: 2 mg/m <sup>3</sup> containing no Asbestos and <1% Quartz respirable dust |
| ETHANOL<br>64-17-5                 | STEL: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup>  | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup>   |
| 2-PROPANOL<br>67-63-0              | STEL: 400 ppm<br>TWA: 200 ppm  | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup> | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | STEL: 75 ppm<br>TWA: 20 ppm  | TWA: 100 ppm<br>TWA: 410 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 205 mg/m <sup>3</sup><br>(vacated) STEL: 75 ppm<br>(vacated) STEL: 300 mg/m <sup>3</sup>    | IDLH: 500 ppm<br>TWA: 50 ppm<br>TWA: 205 mg/m <sup>3</sup><br>STEL: 75 ppm<br>STEL: 300 mg/m <sup>3</sup>      |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

|                             |                     |
|-----------------------------|---------------------|
| <b>Engineering Controls</b> | Showers             |
|                             | Eyewash stations    |
|                             | Ventilation systems |

**Individual protection measures, such as personal protective equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face protection</b>      | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b> | Wear protective gloves and protective clothing.   |
| <b>Respiratory protection</b>   | Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate. |

|                                       |  |
|---------------------------------------|--|
| <b>General Hygiene Considerations</b> | Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. |
|---------------------------------------|--|

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid                   |
| <b>Appearance</b>     | Dark brown               |
| <b>Odor</b>           | Alcohol                  |
| <b>Odor threshold</b> | No information available |

| <b>Property</b>                       | <b>Values</b>            | <b>Remarks • Method</b> |
|---------------------------------------|--------------------------|-------------------------|
| <b>pH</b>                             | No information available |                         |
| <b>Melting point / freezing point</b> | No information available |                         |
| <b>Boiling point / boiling range</b>  | 82 °C / 180 °F           |                         |
| <b>Flash point</b>                    | 16 °C / 61 °F            |                         |
| <b>Evaporation rate</b>               | 7.7                      | Ether = 1               |
| <b>Flammability (solid, gas)</b>      | No information available |                         |
| <b>Flammability Limit in Air</b>      |                          |                         |
| Upper flammability limit:             | 12%                      |                         |
| Lower flammability limit:             | 2.0                      |                         |
| <b>Vapor pressure</b>                 | 33 mm Hg                 |                         |
| <b>Vapor density</b>                  | 2.07                     | Air = 1                 |
| <b>Relative density</b>               | 1.090-1.114              |                         |
| <b>Water solubility</b>               | Partially soluble        |                         |
| <b>Solubility in other solvents</b>   | No information available |                         |
| <b>Partition coefficient</b>          | No information available |                         |
| <b>Autoignition temperature</b>       | No information available |                         |
| <b>Decomposition temperature</b>      | No information available |                         |
| <b>Kinematic viscosity</b>            | No information available |                         |
| <b>Dynamic viscosity</b>              | No information available |                         |
| <b>Explosive properties</b>           | No information available |                         |
| <b>Oxidizing properties</b>           | No information available |                         |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | 19.4%                    |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents

**Hazardous Decomposition Products**

Carbon oxides, Aldehydes, Carboxylic acids

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.  |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.    |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis. May cause sensitization by skin contact. |
| <b>Ingestion</b>    | Toxic if swallowed.   |

| Chemical Name                      | Oral LD50                              | Dermal LD50             | Inhalation LC50                       |
|------------------------------------|--|-------------------------|---------------------------------------|
| ROSIN<br>8050-09-7                 | = 3 mg/kg ( Rat ) = 7600 mg/kg ( Rat ) | > 2500 mg/kg ( Rabbit ) | = 1.5 mg/L ( Rat ) 4 h                |
| ETHANOL<br>64-17-5                 | = 7060 mg/kg ( Rat )                   | -                       | = 124.7 mg/L ( Rat ) 4 h              |
| 2-PROPANOL<br>67-63-0              | = 1870 mg/kg ( Rat )                   | = 4059 mg/kg ( Rabbit ) | = 72600 mg/m <sup>3</sup> ( Rat ) 4 h |
| METHYL ISOBUTYL KETONE<br>108-10-1 | = 2080 mg/kg ( Rat )                   | = 3000 mg/kg ( Rabbit ) | = 8.2 mg/L ( Rat ) 4 h                |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                         | ACGIH | IARC     | NTP   | OSHA |
|---------------------------------------|-------|----------|-------|------|
| TALC<br>14807-96-6                    | -     | Group 3  | -     | -    |
| ETHANOL<br>64-17-5                    | A3    | Group 1  | Known | X    |
| 2-PROPANOL<br>67-63-0                 | -     | Group 1  | -     | X    |
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | A3    | Group 2B | -     | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)  
A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Chronic toxicity**

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

**Target Organ Effects**

Blood, Central nervous system, Central Vascular System (CVS), Eyes, Liver, Reproductive System, Respiratory system, Skin, Thyroid.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 6 mg/kg

ATEmix (dermal) 3537 mg/kg

ATEmix (inhalation-dust/mist) 23.6 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

37.08865% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name                      | Algae/aquatic plants  | Fish   | Crustacea   |
|------------------------------------|---|--|---|
| ROSIN<br>8050-09-7                 | 400: 72 h Desmodesmus subspicatus mg/L EC50   | -  | 3.8 - 5.4: 48 h Daphnia magna mg/L EC50   |
| TALC<br>14807-96-6                 | -   | 100: 96 h Brachydanio rerio g/L LC50 semi-static   | -   |
| ETHANOL<br>64-17-5                 | -   | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |
| 2-PROPANOL<br>67-63-0              | 1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50 | 11130: 96 h Pimephales promelas mg/L LC50 static 9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50                   | 13299: 48 h Daphnia magna mg/L EC50   |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 400: 96 h Pseudokirchneriella subcapitata mg/L EC50                                       | 496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through   | 170: 48 h Daphnia magna mg/L EC50   |

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

| Chemical Name                      | Partition coefficient |
|------------------------------------|-----------------------|
| ETHANOL<br>64-17-5                 | -0.32                 |
| 2-PROPANOL<br>67-63-0              | 0.05                  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 1.19                  |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

| Chemical Name                         | RCRA | RCRA - Basis for Listing          | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------------------|------|-----------------------------------|------------------------|------------------------|
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | -    | Included in waste stream:<br>F039 | -                      | U161                   |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name         | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| ETHANOL<br>64-17-5    | Toxic<br>Ignitable                |
| 2-PROPANOL<br>67-63-0 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION****DOT**

**UN/ID no** 1866  
**Proper shipping name:** Resin, solution, Limited Quantity (LQ)  
**Hazard Class** 3  
**Packing Group** II  
**Emergency Response Guide Number** 127

**IATA**

**UN/ID no** ID 8000  
**Proper shipping name:** Consumer commodity  
**Hazard Class** 9  
**ERG Code** 9L

**IMDG**

**UN/ID no** 1866  
**Proper shipping name:** Resin, solution, Limited Quantity (LQ)  
**Hazard Class** 3  
**Packing Group** II  
**EmS-No** F-E, S-E

**15. REGULATORY INFORMATION****International Inventories**

**TSCA** Complies  
**DSL/NDL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Does not comply  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name        | SARA 313 - Threshold Values % |
|----------------------|-------------------------------|
| 2-PROPANOL - 67-63-0 | 1.0                           |

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name                      | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|------------------------------------|--------------------------|----------------|--|
| METHYL ISOBUTYL KETONE<br>108-10-1 | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name                     | California Proposition 65   |
|-----------------------------------|-----------------------------|
| ETHANOL - 64-17-5                 | Carcinogen<br>Developmental |
| METHANOL - 67-56-1                | Developmental               |
| METHYL ISOBUTYL KETONE - 108-10-1 | Carcinogen<br>Developmental |

**U.S. State Right-to-Know Regulations**

| Chemical Name                      | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| TALC<br>14807-96-6                 | X          | X             | X            |
| ETHANOL<br>64-17-5                 | X          | X             | X            |
| WATER<br>7732-18-5                 | -          | -             | X            |
| 2-PROPANOL<br>67-63-0              | X          | X             | X            |
| METHANOL<br>67-56-1                | X          | X             | X            |
| METHYL ISOBUTYL KETONE<br>108-10-1 | X          | X             | X            |

---

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

|                    |                         |                       |                           |                              |
|--------------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b><u>NFPA</u></b> | <b>Health hazards</b> 2 | <b>Flammability</b> 3 | <b>Instability</b> 0      | -                            |
| <b><u>HMIS</u></b> | <b>Health hazards</b> 2 | <b>Flammability</b> 3 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

**Revision Date** 26-Jan-2015

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Revision Date 08-Jun-2021

Version 12

## 1. IDENTIFICATION

### Product identifier

**Product Name** 2BR FORM A GASKET #2 SEALANT 3OZ

### Other means of identification

**Product Code** 80016

### Recommended use of the chemical and restrictions on use

**Recommended Use** Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                 |             |
|-----------------|-------------|
| Carcinogenicity | Category 1A |
|-----------------|-------------|

### Label elements

#### **Emergency Overview**

#### Signal word

**Danger**

May cause cancer



|                         |  |                     |
|-------------------------|--|---------------------|
| <b>Appearance</b> Black | <b>Physical state</b> Paste / Gel Liquid | <b>Odor</b> Alcohol |
|-------------------------|--|---------------------|

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity

2.14 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical name          | CAS No     | Weight-% |
|------------------------|------------|----------|
| KAOLIN                 | 1332-58-7  | 30 - 60  |
| FUMARATED RESIN        | 65997-04-8 | 10 - 30  |
| ETHANOL                | 64-17-5    | 5 - 10   |
| 2-PROPANOL             | 67-63-0    | 1 - 5    |
| CRYSTALLINE SILICA     | 14808-60-7 | 1 - 5    |
| TITANIUM DIOXIDE       | 13463-67-7 | 0.1 - 1  |
| CARBON BLACK           | 1333-86-4  | 0.1 - 1  |
| METHYL ISOBUTYL KETONE | 108-10-1   | 0.1 - 1  |

**4. FIRST AID MEASURES****Description of first aid measures**

|   |  |
|---|--|
| <b>General advice</b>                     | Get medical advice/attention if you feel unwell.   |
| <b>Eye contact</b>                        | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| <b>Skin contact</b>                       | IF ON SKIN: Wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.                                       |
| <b>Inhalation</b>                         | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to  |

protect themselves.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** May cause allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Carbon dioxide (CO2), Use dry chemical, Foam

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

None in particular.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Use personal protective equipment as required.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in a well-ventilated place. Keep cool.

**Incompatible materials** Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical name                      | ACGIH TLV  | OSHA PEL   | NIOSH IDLH  |
|------------------------------------|--|--|---|
| KAOLIN<br>1332-58-7                | TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction   | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust  |
| ETHANOL<br>64-17-5                 | STEL: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup>   | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup>  |
| 2-PROPANOL<br>67-63-0              | STEL: 400 ppm<br>TWA: 200 ppm  | TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>(vacated) TWA: 400 ppm<br>(vacated) TWA: 980 mg/m <sup>3</sup><br>(vacated) STEL: 500 ppm<br>(vacated) STEL: 1225 mg/m <sup>3</sup>  | IDLH: 2000 ppm<br>TWA: 400 ppm<br>TWA: 980 mg/m <sup>3</sup><br>STEL: 500 ppm<br>STEL: 1225 mg/m <sup>3</sup>   |
| CRYSTALLINE SILICA<br>14808-60-7   | TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter   | TWA: 50 µg/m <sup>3</sup> TWA: 50 µg/m <sup>3</sup> excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust<br>: (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction<br>: (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction | IDLH: 50 mg/m <sup>3</sup> respirable dust<br>TWA: 0.05 mg/m <sup>3</sup> respirable dust   |
| TITANIUM DIOXIDE<br>13463-67-7     | TWA: 10 mg/m <sup>3</sup>  | TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust  | IDLH: 5000 mg/m <sup>3</sup><br>TWA: 2.4 mg/m <sup>3</sup> CIB 63 fine<br>TWA: 0.3 mg/m <sup>3</sup> CIB 63 ultrafine, including engineered nanoscale     |
| CARBON BLACK<br>1333-86-4          | TWA: 3 mg/m <sup>3</sup> inhalable particulate matter  | TWA: 3.5 mg/m <sup>3</sup><br>(vacated) TWA: 3.5 mg/m <sup>3</sup>   | IDLH: 1750 mg/m <sup>3</sup><br>TWA: 3.5 mg/m <sup>3</sup><br>TWA: 0.1 mg/m <sup>3</sup> Carbon black in presence of Polycyclic aromatic hydrocarbons PAH |
| METHYL ISOBUTYL KETONE<br>108-10-1 | STEL: 75 ppm<br>TWA: 20 ppm  | TWA: 100 ppm<br>TWA: 410 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 205 mg/m <sup>3</sup><br>(vacated) STEL: 75 ppm<br>(vacated) STEL: 300 mg/m <sup>3</sup>   | IDLH: 500 ppm<br>TWA: 50 ppm<br>TWA: 205 mg/m <sup>3</sup><br>STEL: 75 ppm<br>STEL: 300 mg/m <sup>3</sup>   |

NIOSH IDLH *Immediately Dangerous to Life or Health*

#### **Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

#### Appropriate engineering controls

##### **Engineering Controls**

Showers  
Eyewash stations  
Ventilation systems

#### Individual protection measures, such as personal protective equipment

##### **Eye/face protection**

Wear safety glasses with side shields (or goggles).

##### **Skin and body protection**

Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection**

Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties**

|                       |                          |
|-----------------------|--------------------------|
| <b>Physical state</b> | Paste / Gel Liquid       |
| <b>Appearance</b>     | Black                    |
| <b>Odor</b>           | Alcohol                  |
| <b>Odor threshold</b> | No information available |

| <u>Property</u>                | <u>Values</u>                    | <u>Remarks • Method</u> |
|--------------------------------|----------------------------------|-------------------------|
| pH                             | No information available         |                         |
| Melting point / freezing point | No information available         |                         |
| Boiling point / boiling range  | 82 °C / 179.6 °F                 |                         |
| Flash point                    | No information available °C / °F | ASTM D 4359             |
| Evaporation rate               | 7.7                              | Ether = 1               |
| Flammability (solid, gas)      | No information available         |                         |
| Flammability Limit in Air      |                                  |                         |
| Upper flammability limit:      | No information available         |                         |
| Lower flammability limit:      | No information available         |                         |
| Vapor pressure                 | 33 mm Hg @ 68°F                  |                         |
| Vapor density                  | 2.0                              | Air = 1                 |
| Relative density               | 1.5                              |                         |
| Water solubility               | Partially soluble                |                         |
| Solubility(ies)                | No information available         |                         |
| Partition coefficient          | No information available         |                         |
| Autoignition temperature       | No information available         |                         |
| Hyphen                         | No information available         |                         |
| Kinematic viscosity            | No information available         |                         |
| Dynamic viscosity              | No information available         |                         |
| Explosive properties           | No information available         |                         |
| Oxidizing properties           | No information available         |                         |

**Other Information**

|   |                          |
|---|--------------------------|
| <b>Softening point</b>                                    | No information available |
| <b>Molecular weight</b>                                   | No information available |
| <b>VOC content</b>  | 11%                      |
| <b>Density</b>  | No information available |
| <b>Bulk density</b>                                       | No information available |
| <b>SADT (self-accelerating decomposition temperature)</b> | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No information available

**Chemical stability**

Stable under normal conditions

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Excessive heat.

**Incompatible materials**

Strong oxidizing agents

### Hazardous Decomposition Products

Carbon oxides

Aldehydes

Carboxylic acids

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.   |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.   |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.  |

| Chemical name                      | Oral LD50             | Dermal LD50             | Inhalation LC50                       |
|------------------------------------|-----------------------|-------------------------|---------------------------------------|
| KAOLIN<br>1332-58-7                | > 5000 mg/kg ( Rat )  | > 5000 mg/kg ( Rat )    | -                                     |
| FUMARATED RESIN<br>65997-04-8      | > 2000 mg/kg ( Rat )  | -                       | -                                     |
| ETHANOL<br>64-17-5                 | = 7060 mg/kg ( Rat )  | -                       | = 124.7 mg/L ( Rat ) 4 h              |
| 2-PROPANOL<br>67-63-0              | 5050 mg/kg            | 12800 mg/kg             | = 72600 mg/m <sup>3</sup> ( Rat ) 4 h |
| TITANIUM DIOXIDE<br>13463-67-7     | > 10000 mg/kg ( Rat ) | -                       | -                                     |
| CARBON BLACK<br>1333-86-4          | > 15400 mg/kg ( Rat ) | -                       | > 4.6 mg/m <sup>3</sup> ( Rat ) 4 h   |
| METHYL ISOBUTYL KETONE<br>108-10-1 | = 2080 mg/kg ( Rat )  | = 3000 mg/kg ( Rabbit ) | 2000 - 4000 ppm ( Rat ) 4 h           |

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name                         | ACGIH | IARC     | NTP   | OSHA |
|---------------------------------------|-------|----------|-------|------|
| ETHANOL<br>64-17-5                    | A3    | Group 1  | Known | X    |
| CRYSTALLINE SILICA<br>14808-60-7      | A2    | Group 1  | Known | X    |
| TITANIUM DIOXIDE<br>13463-67-7        | -     | Group 2B | -     | X    |
| CARBON BLACK<br>1333-86-4             | A3    | Group 2B | -     | X    |
| METHYL ISOBUTYL<br>KETONE<br>108-10-1 | A3    | Group 2B | -     | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Chronic toxicity**

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

**Target organ effects**

Blood, Central nervous system, Eyes, Liver, Reproductive system, Respiratory system, Skin, Thyroid, Lungs.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 7016 mg/kg

ATEmix (dermal) 58017 mg/kg

ATEmix (inhalation-dust/mist) 102.2 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

0.042 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

| Chemical name                      | Partition coefficient |
|------------------------------------|-----------------------|
| ETHANOL<br>64-17-5                 | -0.32                 |
| 2-PROPANOL<br>67-63-0              | 0.05                  |
| METHYL ISOBUTYL KETONE<br>108-10-1 | 1.19                  |

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

**US EPA Waste Number**

U154 U161

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical name         | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| ETHANOL<br>64-17-5    | Toxic<br>Ignitable                |
| 2-PROPANOL<br>67-63-0 | Toxic<br>Ignitable                |

**14. TRANSPORT INFORMATION**

**DOT**

Proper shipping name Not regulated

**IATA**

Proper shipping name Not regulated

**IMDG**

Proper shipping name Not regulated

**15. REGULATORY INFORMATION****International Inventories**

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDL       | Complies        |
| EINECS/ELINCS | Complies        |
| ENCS          | Does not comply |
| IECSC         | Complies        |
| KECL          | Complies        |
| PICCS         | Complies        |
| AICS          | Complies        |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name                     | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| 2-PROPANOL - 67-63-0              | 1.0                           |
| METHYL ISOBUTYL KETONE - 108-10-1 | 0.1                           |

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name                      | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|------------------------------------|--------------------------|----------------|--|
| METHYL ISOBUTYL KETONE<br>108-10-1 | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical name                      | California Proposition 65                                    |
|------------------------------------|--|
| ETHANOL<br>64-17-5                 | Carcinogen<br>Developmental                                  |
| CRYSTALLINE SILICA<br>14808-60-7   | *Carcinogen  |
| TITANIUM DIOXIDE<br>13463-67-7     | *Carcinogen (airborne, unbound particles of respirable size) |
| METHANOL<br>67-56-1                | Developmental  |
| CARBON BLACK<br>1333-86-4          | *Carcinogen (airborne, unbound particles of respirable size) |
| METHYL ISOBUTYL KETONE<br>108-10-1 | Carcinogen<br>Developmental                                  |

- \*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product
- Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage
- Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage

**U.S. State Right-to-Know Regulations**

| Chemical name                      | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| KAOLIN<br>1332-58-7                | X          | X             | X            |
| ETHANOL<br>64-17-5                 | X          | X             | X            |
| 2-PROPANOL<br>67-63-0              | X          | X             | X            |
| CRYSTALLINE SILICA<br>14808-60-7   | X          | X             | X            |
| TITANIUM DIOXIDE<br>13463-67-7     | X          | X             | X            |
| METHANOL<br>67-56-1                | X          | X             | X            |
| CARBON BLACK<br>1333-86-4          | X          | X             | X            |
| METHYL ISOBUTYL KETONE<br>108-10-1 | X          | X             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)  
 HMIS (Hazardous Material Information System)

Revision Date 08-Jun-2021

**Disclaimer**

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End of Safety Data Sheet



# SAFETY DATA SHEET

Revision Date 05-Oct-2020

Version 17

## 1. IDENTIFICATION

### Product identifier

**Product Name** MEDIUM STRENGTH THREADLOCKER BLUE 6 ML

### Other means of identification

**Product Code** 24200

### Recommended use of the chemical and restrictions on use

**Recommended Use** Adhesive

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
6875 Parkland Blvd.  
Solon, Ohio 44139 USA  
Telephone: 1-87-Permatex  
(866) 732-9502

#### 24-hour emergency phone number

Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

#### May Also Be Distributed by:

ITW Permatex Canada  
101-2360 Bristol Circle  
Oakville, ON Canada L6H 6M5  
Telephone: (800) 924-6994

**E-mail address:** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Skin corrosion/irritation                          | Category 2  |
| Serious eye damage/eye irritation                  | Category 2A |
| Carcinogenicity                                    | Category 1B |
| Specific target organ toxicity (repeated exposure) | Category 2  |

### Label elements

#### **Emergency Overview**

#### **Signal word**

**Danger**

Causes skin irritation  
Causes serious eye irritation  
May cause cancer  
May cause damage to organs through prolonged or repeated exposure



**Appearance** Blue

**Physical state** Liquid

**Odor** Mild

**Precautionary Statements - Prevention**

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name                   | CAS No     | Weight-% |
|---------------------------------|------------|----------|
| DIMETHYLBENZYL<br>HYDROPEROXIDE | 80-15-9    | 1 - 5    |
| TITANIUM DIOXIDE                | 13463-67-7 | 0.1 - 1  |
| CUMENE                          | 98-82-8    | 0.1 - 1  |

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**

If symptoms persist, call a physician.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms

persist, call a physician.

|   |   |
|---|---|
| <b>Skin contact</b>                       | Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. |
| <b>Inhalation</b>                         | Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.                       |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Do NOT induce vomiting.                                     |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required.  |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use, Use dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray (fog), Alcohol resistant foam

**Unsuitable extinguishing media**

None

**Specific hazards arising from the chemical**

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See section 12 for additional ecological information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Use with local exhaust ventilation. All equipment used when handling the product must be grounded. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Keep in properly labeled containers.

**Incompatible materials** Strong oxidizing agents, Peroxides, Reducing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical Name                  | ACGIH TLV                 | OSHA PEL   | NIOSH IDLH  |
|--------------------------------|---------------------------|--|---|
| TITANIUM DIOXIDE<br>13463-67-7 | TWA: 10 mg/m <sup>3</sup> | TWA: 15 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 10 mg/m <sup>3</sup> total dust   | IDLH: 5000 mg/m <sup>3</sup><br>TWA: 2.4 mg/m <sup>3</sup> CIB 63 fine<br>TWA: 0.3 mg/m <sup>3</sup> CIB 63 ultrafine, including engineered nanoscale |
| CUMENE<br>98-82-8              | TWA: 50 ppm               | TWA: 50 ppm<br>TWA: 245 mg/m <sup>3</sup><br>(vacated) TWA: 50 ppm<br>(vacated) TWA: 245 mg/m <sup>3</sup><br>(vacated) S*<br>S* | IDLH: 900 ppm<br>TWA: 50 ppm<br>TWA: 245 mg/m <sup>3</sup>  |

NIOSH IDLH Immediately Dangerous to Life or Health

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Appearance     | Blue                     |
| Odor           | Mild                     |
| Odor threshold | No information available |

| Property                       | Values                   | Remarks • Method |
|--------------------------------|--------------------------|------------------|
| pH                             | No information available |                  |
| Melting point / freezing point | No information available |                  |
| Boiling point / boiling range  | > 200 °C / > 392 °F      |                  |
| Flash point                    | 131 °C / 268 °F          |                  |
| Evaporation rate               | No information available |                  |
| Flammability (solid, gas)      | No information available |                  |
| Flammability Limit in Air      |                          |                  |
| Upper flammability limit:      | No information available |                  |
| Lower flammability limit:      | No information available |                  |
| Vapor pressure                 | No information available |                  |
| Vapor density                  | No information available |                  |
| Relative density               | 1.01                     |                  |
| Water solubility               | Immiscible in water      |                  |
| Solubility(ies)                | No information available |                  |
| Partition coefficient          | No information available |                  |
| Autoignition temperature       | No information available |                  |
| Decomposition temperature      | No information available |                  |
| Kinematic viscosity            | No information available |                  |
| Dynamic viscosity              | 1,100 mPas @20°C (68°F)  |                  |
| Explosive properties           | No information available |                  |
| Oxidizing properties           | No information available |                  |

### Other Information

|  |                          |
|--|--------------------------|
| Softening point                                    | No information available |
| Molecular weight                                   | No information available |
| VOC content  | <3%                      |
| Density  | No information available |
| Bulk density                                       | No information available |
| SADT (self-accelerating decomposition temperature) | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No information available

### Chemical stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible materials

Strong oxidizing agents, Peroxides, Reducing agents

### Hazardous Decomposition Products

Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled. |
| <b>Eye contact</b>  | Contact with eyes may cause irritation. May cause redness and tearing of the eyes.                               |
| <b>Skin contact</b> | May cause skin irritation and/or dermatitis.   |
| <b>Ingestion</b>    | Ingestion may cause irritation to mucous membranes.  |

| Chemical Name                              | Oral LD50             | Dermal LD50              | Inhalation LC50        |
|--|-----------------------|--------------------------|------------------------|
| DIMETHYLBENZYL<br>HYDROPEROXIDE<br>80-15-9 | = 382 mg/kg ( Rat )   | = 0.126 mL/kg ( Rabbit ) | = 220 ppm ( Rat ) 4 h  |
| TITANIUM DIOXIDE<br>13463-67-7             | > 10000 mg/kg ( Rat ) | -                        | -                      |
| CUMENE<br>98-82-8                          | = 1400 mg/kg ( Rat )  | = 12300 µL/kg ( Rabbit ) | > 3577 ppm ( Rat ) 6 h |

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name                  | ACGIH | IARC     | NTP                    | OSHA |
|--------------------------------|-------|----------|------------------------|------|
| TITANIUM DIOXIDE<br>13463-67-7 | -     | Group 2B | -                      | X    |
| CUMENE<br>98-82-8              | -     | Group 2B | Reasonably Anticipated | X    |

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 18864 mg/kg

**ATEmix (dermal)** 54321 mg/kg

**ATEmix (inhalation-dust/mist)** 24.7 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0.094 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Mobility

No information available.

| Chemical Name     | Partition coefficient |
|-------------------|-----------------------|
| CUMENE<br>98-82-8 | 3.7                   |

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b> | Do not reuse container.   |
| <b>US EPA Waste Number</b>    | U055 U096 U166  |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name                           | California Hazardous Waste Status |
|---|-----------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | Toxic<br>Ignitable                |
| CUMENE<br>98-82-8                       | Toxic<br>Ignitable                |

### 14. TRANSPORT INFORMATION

**DOT**

Proper shipping name Not regulated

**IATA**

Proper shipping name Not regulated

**IMDG**

Proper shipping name Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

|               |            |
|---------------|------------|
| TSCA          | Complies   |
| DSL/NDSL      | Complies   |
| EINECS/ELINCS | Complies   |
| ENCS          | Complies   |
| IECSC         | Complies   |
| KECL          | Complies   |
| PICCS         | Complies   |
| AICS          | Not Listed |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name                          | SARA 313 - Threshold Values % |
|--|-------------------------------|
| DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9 | 1.0                           |
| SACCHARIN - 81-07-2                    | 1.0                           |
| CUMENE - 98-82-8                       | 0.1                           |

#### **SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | No  |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | No  |

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name                           | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                   |
|---|--------------------------|----------------|--|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | 10 lb                    | -              | RQ 10 lb final RQ<br>RQ 4.54 kg final RQ   |
| CUMENE<br>98-82-8                       | 5000 lb                  | -              | RQ 5000 lb final RQ<br>RQ 2270 kg final RQ |

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name                  | California Proposition 65                                    |
|--------------------------------|--|
| TITANIUM DIOXIDE<br>13463-67-7 | *Carcinogen (airborne, unbound particles of respirable size) |
| CUMENE<br>98-82-8              | Carcinogen   |

• \*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product

#### **U.S. State Right-to-Know Regulations**

| Chemical Name                           | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| DIMETHYLBENZYL HYDROPEROXIDE<br>80-15-9 | X          | X             | X            |
| SACCHARIN<br>81-07-2                    | X          | X             | X            |
| CUMENE<br>98-82-8                       | X          | X             | X            |
| 2-BUTOXYETHANOL<br>111-76-2             | X          | X             | X            |
| 1,4-NAPHTHOQUINONE<br>130-15-4          | X          | X             | X            |

#### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**WHMIS Hazard Class**

D2B - Toxic materials

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                         |                       |                           |                              |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Instability</b> 0      | -                            |
| <b>HMIS</b> | <b>Health hazards</b> 2 | <b>Flammability</b> 1 | <b>Physical hazards</b> 0 | <b>Personal protection</b> B |

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date 05-Oct-2020

**Disclaimer**

Illinois Tool Works Inc. believes the information contained in this data sheet is accurate as of the date compiled. However, Illinois Tool Works Inc. makes no warranty, express or implied, as to the accuracy, reliability or completeness of the information. User is responsible for evaluating whether such information or this product is fit for a particular purpose and suitable for a particular use or application. The information in this data sheet may not be valid if this product is used in combination with other products or in processes for which it was not designed. Illinois Tool Works Inc. disclaims any liability for consequential or incidental damages of any kind, including lost profits, arising from the sale or use of this product. Ensure you have the most current version of this data sheet by contacting us or reviewing our web site.

**End of Safety Data Sheet**

Issue Date 10-Mar-2015

Revision Date 10-Mar-2015

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product identifier**

**Product Name** ALPHA BAC

**Other means of identification**

**Product Code** 5688

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Disinfectant. Food Contact Sanitizer. Laundry Sanitizer.

**Uses advised against** Use only as stated on label.

**Details of the supplier of the safety data sheet**

**Supplier** Alpha Chemical Services, Inc.  
46 Morton Street  
Stoughton, MA 02072  
Phone: (800) 464-9872

**Emergency telephone number**

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                   |                           |
|-----------------------------------|---------------------------|
| Acute toxicity - Oral             | Not classified            |
| Acute toxicity - Dermal           | Not classified            |
| Skin corrosion/irritation         | Category 1 Sub-category A |
| Serious eye damage/eye irritation | Category 1                |

**Label elements**

**Emergency Overview**

**Danger**

**Hazard statements**

Causes severe skin burns and eye damage



**Appearance** Clear Red

**Physical state** Liquid

**Odor** Mild

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Specific Treatment (See Section 4 on the SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Immediately call a POISON CENTER or doctor/physician

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Immediately call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name                                    | CAS No.    | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Alkyl (C12-16) dimethyl benzyl ammonium chloride | 68424-85-1 | 1-5      | *            |
| Octyl decyl dimethyl ammonium chloride           | 32426-11-2 | 1-5      | *            |
| Didecyl Dimethyl Ammonium Chloride               | 7173-51-5  | 1-5      | *            |
| Ethanol  | 64-17-5    | 1-5      | *            |
| Diocetyl dimethyl ammonium chloride              | 5538-94-3  | 1-5      | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures****Skin Contact**

Wash skin with soap and water.

**Eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.  
Consult a physician

**Inhalation**

Remove to fresh air.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed****Symptoms**

No Information available.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No Information available.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name      | ACGIH TLV      | OSHA PEL   | NIOSH IDLH   |
|--------------------|----------------|--|--|
| Ethanol<br>64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup><br>(vacated) TWA: 1000 ppm<br>(vacated) TWA: 1900 mg/m <sup>3</sup> | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup> |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers, Eyewash stations & Ventilation systems.

**Individual protection measures, such as personal protective equipment**

|                                 |   |
|---------------------------------|---|
| <b>Eye/face protection</b>      | Wear safety glasses with side shields (or goggles).   |
| <b>Skin and body protection</b> | Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.  |
| <b>Respiratory protection</b>   | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| <b>General Hygiene</b>          | Handle in accordance with good industrial hygiene and safety practice.  |

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                                      |                          |                         |                          |
|--------------------------------------|--------------------------|-------------------------|--------------------------|
| <b>Physical state</b>                | Liquid                   |                         |                          |
| <b>Appearance</b>                    | Clear Red                |                         |                          |
| <b>Odor</b>                          | Mild                     | <b>Odor threshold</b>   | No Information available |
| <b>Property</b>                      | <b>Values</b>            | <b>Remarks • Method</b> |                          |
| pH                                   | 6.0 - 8.0                |                         |                          |
| <b>Melting point/freezing point</b>  | No Information available |                         |                          |
| <b>Boiling point / boiling range</b> | No Information available |                         |                          |
| <b>Flash point</b>                   | None                     |                         |                          |
| <b>Evaporation rate</b>              | No Information available |                         |                          |
| <b>Flammability (solid, gas)</b>     | No Information available |                         |                          |
| <b>Flammability Limits in Air</b>    |                          |                         |                          |
| Upper flammability limit:            | No Information available |                         |                          |
| Lower flammability limit:            | No Information available |                         |                          |
| <b>Vapor pressure</b>                | No Information available |                         |                          |
| <b>Vapor density</b>                 | No Information available |                         |                          |
| <b>Specific Gravity</b>              | 0.9656                   |                         |                          |
| <b>Water solubility</b>              | Complete                 |                         |                          |
| <b>Solubility in other solvents</b>  | No Information available |                         |                          |
| <b>Partition coefficient</b>         | No Information available |                         |                          |
| <b>Autoignition temperature</b>      | No Information available |                         |                          |
| <b>Decomposition temperature</b>     | No Information available |                         |                          |
| <b>Kinematic viscosity</b>           | No Information available |                         |                          |
| <b>Viscosity</b>                     | No Information available |                         |                          |
| <b>Explosive properties</b>          | No Information available |                         |                          |
| <b>Oxidizing properties</b>          | No Information available |                         |                          |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                            |                    |
|----------------------------|--------------------|
| <b>Product Information</b> | No data available  |
| <b>Inhalation</b>          | No data available. |
| <b>Eye contact</b>         | No data available. |
| <b>Skin Contact</b>        | No data available. |
| <b>Ingestion</b>           | No data available. |

| Chemical Name      | Oral LD50            | Dermal LD50 | Inhalation LC50          |
|--------------------|----------------------|-------------|--------------------------|
| Ethanol<br>64-17-5 | = 7060 mg/kg ( Rat ) | Yes         | = 124.7 mg/L ( Rat ) 4 h |

**Information on toxicological effects**

**Symptoms** No Information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No Information available.  
**Germ cell mutagenicity** No Information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

| Chemical Name      | ACGIH | IARC    | NTP   | OSHA |
|--------------------|-------|---------|-------|------|
| Ethanol<br>64-17-5 | A3    | Group 1 | Known | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No Information available.  
**STOT - single exposure** No Information available.  
**STOT - repeated exposure** No Information available.  
**Chronic toxicity** Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.  
**Target organ effects** Blood, Central nervous system, EYES, Liver, Reproductive System, Respiratory system, Skin.  
**Aspiration hazard** No Information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

8.156053% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name      | Algae/aquatic plants | Fish   | Crustacea   |
|--------------------|----------------------|--|---|
| Ethanol<br>64-17-5 | Yes                  | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h<br>Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h<br>Pimephales promelas mg/L LC50 flow-through | 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 |

### Persistence and degradability

No Information available.

### Bioaccumulation

No Information available.

| Chemical Name      | Partition coefficient |
|--------------------|-----------------------|
| Ethanol<br>64-17-5 | -0.32                 |

### Other adverse effects

No Information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Disposal of wastes**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes can not be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Contaminated packaging**

Non-refillable container. Do not reuse this container to hold materials other than pesticides or diluted pesticides (rinsate). Offer for recycling if available or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. Follow Pesticide Disposal instructions.

## 14. TRANSPORT INFORMATION

### DOT

Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDL       | Complies        |
| EINECS/ELINCS | Complies        |
| AICS          | Does not comply |

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute health hazard               | No |
| Chronic Health Hazard             | No |
| Fire hazard                       | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard                   | No |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name     | California Proposition 65   |
|-------------------|-----------------------------|
| Ethanol - 64-17-5 | Carcinogen<br>Developmental |

**U.S. State Right-to-Know Regulations**

| Chemical Name      | New Jersey | Massachusetts | Pennsylvania |
|--------------------|------------|---------------|--------------|
| Ethanol<br>64-17-5 | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** 10324-81-10634

**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. See the product label for the FIFRA hazard information as required on the pesticide label.

**16. OTHER INFORMATION**

|             |                  |                |                    |   |
|-------------|------------------|----------------|--------------------|---|
| <b>NFPA</b> | Health hazards 2 | Flammability 1 | Instability 0      | <b>Physical and Chemical Properties</b> Yes |
| <b>HMIS</b> | Health hazards 2 | Flammability 1 | Physical hazards 0 | <b>Personal protection</b> N/A              |

**Issue Date** 10-Mar-2015

**Revision Date** 10-Mar-2015

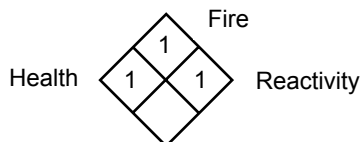
**Revision Note**

No Information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

**A-9 ALUMINUM CUTTING FLUID****NFPA****RELTON** CORPORATION**MATERIAL SAFETY DATA SHEET**Meets requirements of 29 CFR 1910.1200  
(Federal Hazard Communication Standard)**HMIS**

|            |   |
|------------|---|
| Health     | 1 |
| Fire       | 1 |
| Reactivity | 1 |

☐ **SECTION I**

|   |   |  |
|---|---|--|
| PRODUCT NAME OR NUMBER  | <b>A-9® ALUMINUM CUTTING FLUID</b>                            |  |
| MANUFACTURER'S NAME   | Relton Corporation  | EMERGENCY TELEPHONE NO<br>Chemtrec - (800) 424-9300    |
| ADDRESS (Number, Street, City, State, and Zip Code)                       | 317 Rolyn Place, Arcadia, CA 91007-2838                       | Non-Emergency Ph. No.<br>(323) 681-2551 (800) 423-1505 |
| HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME (49 CFR 172.101) | NA  | HAZARD CLASS (49 CFR 172.101)<br>NA                    |
| CHEMICAL FAMILY   | Mixture: predominately hydrocarbon base with bland additives. | Formula See Section II                                 |

☐ **SECTION II - INGREDIENTS**

|                           | TLV | PEL | STEL | C.A.S. NO.   | %     |
|---------------------------|-----|-----|------|--------------|-------|
| Mineral Oil               | NE  | NE  | NE   | 64742-58-1   | > 70  |
| Bland Additive            | NE  | NE  | NE   | Trade secret | < 25  |
| Bland Additive            | NE  | NE  | NE   | Trade secret | < 16  |
| Perfume                   | NE  | NE  | NE   | -- --        | < 1   |
| Green dye, Pharmacy Grade | NE  | NE  | NE   | -- --        | trace |

(See Section V for Health data)

Data is based on testing mixture as a whole. Neither the mixture nor any of its ingredients is on the carcinogen or suspected-carcinogen list of the NTP, the IARC, or OSHA. Contains no Calif. Prop. 65 substance. Not reportable under SARA. All components are listed on the TSCA inventory.

☐ **SECTION III - PHYSICAL DATA**

|                              |  |   |                    |                 |                  |
|------------------------------|--|---|--------------------|-----------------|------------------|
| BOILING POINT ( X°F ) ( C° ) | 400° F                                   | SPECIFIC GRAVITY ( H <sub>2</sub> O=1 ) @ 25° C | 0.883              | Freezing Point  | -20° F           |
| VAPOR PRESSURE ( mm Hg )     | 100° F: .1 mm                            | PERCENT VOLATILE BY VOLUME ( % )                | NA                 | VOC             | NA               |
| VAPOR DENSITY ( AIR=1 )      | NA                                       | EVAPORATION RATE ( WATER=1 )                    | NA                 |                 |                  |
| SOLUBILITY IN WATER          | Negligible                               | pH=   | NA                 |                 |                  |
| APPEARANCE AND ODOR          | light green oil with slight,fatty odor . |   | MATERIAL IS<br>GAS | LIQUID<br>PASTE | SOLID-<br>POWDER |

☐ **SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

|  |            |                  |     |     |
|--|------------|------------------|-----|-----|
| FLASH POINT ( method used )  | 266° F CCC | FLAMMABLE LIMITS | LFL | UFL |
|  |            | Non-Flammable    | NA  | NA  |
| EXTINGUISHING MEDIA Use CO2, dry chemicals , foam, water as a mist only .  |            |                  |     |     |
| SPECIAL FIRE FIGHTING PROCEDURES Prefer CO2 or sand as with oil fire.  |            |                  |     |     |
| UNUSUAL FIRE AND EXPLOSION HAZARDS No unusual hazards  |            |                  |     |     |
| Exposing containers to intense heat could cause drums to rupture. Cool fire-exposed containers with water spray to prevent rup ture. |            |                  |     |     |

☐ **SECTION V - HEALTH HAZARD DATA**

|  |
|--|
| EFFECTS OF OVEREXPOSURE  |
| Eyes and skin: may cause mild irritation. Inhalation: may cause mild upper respiratory irritation. Ingestion: possible nausea.   |
| EMERGENCY AND FIRST AID PROCEDURES   |
| Eyes: flush for 15 min. with water . Skin: wash with soap and water . Inhalation: remove to fresh air . Ingestion: do not induce vomiting; give lots of water to a conscious person. Call Doctor |

NE=not established NF=not found NA=not applicable ND=not determined

**A-9 ALUMINUM CUTTING FLUID**☐ **SECTION VI - REACTIVITY DATA**

|  |                |   |  |
|--|----------------|---|--|
| STABILITY  | UNSTABLE       |   | CONDITIONS TO AVOID:<br>Flame, heat, strong oxidizing agents |
|  | STABLE         | X |  |
| INCOMPATIBILITY (materials to avoid): Swells natural rubber and some plastics. Slight etching of light metals on prolonged exposure may occur. |                |   |  |
| HAZARDOUS DECOMPOSITION PRODUCTS. CO, CO2, and acrolein when combusted   |                |   |  |
| HAZARDOUS<br>POLYMERIZATION  | MAY OCCUR      |   | CONDITIONS TO AVOID:<br>NA                                   |
|  | WILL NOT OCCUR | X |  |

☐ **SECTION VII - SPILL OR LEAK PROCEDURES**

|  |  |
|--|--|
| STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.<br>Wear respirator and protective clothing .Treat as oil spill. Soak up on absorbent clay or sand and remove to containers. |  |
| WASTE DISPOSAL METHOD Transport in DOT-approved container to EPA-approved treatment, storage, and disposal facility.<br>Follow local, State & Federal disposal regulations.            |  |

☐ **SECTION VIII - SPECIAL PROTECTION INFORMATION**

|   |   |   |
|---|---|---|
| RESPIRATORY PROTECTION (specify type) Normally not needed. For oil-type mist, use NIOSH listed respirator . |   |   |
| VENTILATION<br>Local-mechanical<br>to remove oil mist   | LOCAL EXHAUST (Specify Rate)<br>Adequate to avoid fumes and oil mists | SPECIAL Not required normally                       |
|   | MECHANICAL (General) (Specify Rate) NA                                | OTHER   |
| PROTECTIVE GLOVES Nitrile-type, oil resistant   |   | EYE PROTECTION Chemical goggles or full faceshield. |
| OTHER PROTECTIVE EQUIPMENT Clean clothes. Apron or chemical suit where splashing may occur .                |   |   |

☐ **SECTION IX - SPECIAL PRECAUTIONS**

|   |  |
|---|--|
| PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING<br>Avoid production of oil mist. Avoid excessive heat. Avoid repeated or prolonged skin or eye contact.             |  |
| OTHER PRECAUTIONS<br>While there is no TLV established for this product, airborne mist should be kept below the nuisance TLV for oil mist: 5Mg/meter <sup>3</sup> . |  |

**ADDITIONAL INFORMATION**

**DOT:** No hazardous substance      UN or NA#: Not applicable  
 No hazard class      Freight Classification: Petroleum oil, lubricating  
 No DOT ID#      It# 155250 Class 65

**SARA:** Not considered to be subject to Title III

**TSCA:** All components required to be listed on the inventory are listed.

**IARC-NTP-OSHA:** Neither the mixture nor any component is listed as a carcinogen or suspected carcinogen.

**California Prop. 65 Material:** None.

**RELTON**

CORPORATION



317 ROLYN PLACE ARCADIA CALIFORNIA 91007-2838

Phone: (323) 681-2551 (800) 423-1505

Emerg: Chemtrec - (800) 424-9300

Prepared: 12-10-93      Updated: 10-23-97  
 Updated: 12-6-94      Updated: 02-29-00  
 Updated: 5-7-96      Updated: 03/10/03

by Dr. Robert E. Pratt,  
consulting chemist

Updated: 07/22/05

Updated: 06/10/10

Updated: 01/10/11

# Safety Data Sheet



## 1. Identification

|                             |  |                         |  |
|-----------------------------|--|-------------------------|--|
| <b>Product Name:</b>        | STRUST SSPR 6PK LEAK SEAL CLEAR  | <b>Revision Date:</b>   | 2/7/2019   |
| <b>Product Identifier:</b>  | 265495   | <b>Supersedes Date:</b> | 1/3/2019   |
| <b>Recommended Use:</b>     | Leak Sealer/Aerosols   |                         |  |
| <b>Supplier:</b>            | Rust-Oleum Corporation<br>11 Hawthorn Parkway<br>Vernon Hills, IL 60061<br>USA | <b>Manufacturer:</b>    | Rust-Oleum Corporation<br>11 Hawthorn Parkway<br>Vernon Hills, IL 60061<br>USA |
| <b>Preparer:</b>            | Regulatory Department  |                         |  |
| <b>Emergency Telephone:</b> | 24 Hour Hotline: 847-367-7700  |                         |  |

## 2. Hazard Identification

### Classification

### Symbol(s) of Product



### Signal Word

Danger

### Possible Hazards

11% of the mixture consists of ingredient(s) of unknown acute toxicity.

### GHS HAZARD STATEMENTS

|  |      |  |
|--|------|--|
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled.  |
| Carcinogenicity, category 2            | H351 | Suspected of causing cancer.                                       |
| Compressed Gas                         | H280 | Contains gas under pressure; may explode if heated.                |
| Eye Irritation, category 2             | H319 | Causes serious eye irritation.                                     |
| Flammable Aerosol, category 1          | H222 | Extremely flammable aerosol.                                       |
| Reproductive Toxicity, category 1B     | H360 | May damage fertility or the unborn child.                          |
| STOT, repeated exposure, category 2    | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Skin Irritation, category 2            | H315 | Causes skin irritation.  |

### GHS LABEL PRECAUTIONARY STATEMENTS

|      |  |
|------|--|
| P201 | Obtain special instructions before use.  |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source.  |
| P251 | Do not pierce or burn, even after use.   |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray.  |
| P264 | Wash hands thoroughly after handling.  |

|                |  |
|----------------|--|
| P271           | Use only outdoors or in a well-ventilated area.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313      | IF exposed or concerned: Get medical advice/attention.   |
| P312           | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P321           | For specific treatment see label   |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P362+P364      | Take off contaminated clothing and wash it before reuse.   |
| P405           | Store locked up.   |
| P410+P403      | Protect from sunlight. Store in a well-ventilated place.   |
| P410+P412      | Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.   |
| P501           | Dispose of contents/container in accordance with local, regional and national regulations.                                       |

### 3. Composition / Information On Ingredients

#### HAZARDOUS SUBSTANCES

| <u>Chemical Name</u>                             | <u>CAS-No.</u> | <u>Wt.%<br/>Range</u> | <u>GHS Symbols</u>    | <u>GHS Statements</u>        |
|--|----------------|-----------------------|-----------------------|------------------------------|
| Naphtha, Petroleum, Hydrotreated Light           | 64742-49-0     | 25-50                 | GHS08                 | H304                         |
| Propane  | 74-98-6        | 10-25                 | GHS04                 | H280                         |
| n-Butane   | 106-97-8       | 2.5-10                | GHS04                 | H280                         |
| Xylenes (o-, m-, p- isomers)                     | 1330-20-7      | 2.5-10                | GHS02-GHS07           | H226-315-319-332             |
| Ethyl Acetate                                    | 141-78-6       | 2.5-10                | GHS02-GHS07           | H225-319-332-336             |
| Methyl Acetate                                   | 79-20-9        | 2.5-10                | GHS02-GHS07           | H225-319-336                 |
| Ethylbenzene                                     | 100-41-4       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-332-351-373         |
| n-Heptane  | 142-82-5       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-315-336             |
| Octane   | 111-65-9       | 1.0-2.5               | GHS02-GHS07-<br>GHS08 | H225-304-315-336             |
| bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 41556-26-7     | 0.1-1.0               | GHS07                 | H317                         |
| N-Methyl 2-Pyrrolidone                           | 872-50-4       | 0.1-1.0               | GHS07-GHS08           | H315-319-332-335-360         |
| Methanol   | 67-56-1        | 0.1-1.0               | GHS02-GHS06-<br>GHS08 | H225-331-370                 |
| Toluene  | 108-88-3       | 0.1-1.0               | GHS02-GHS07-<br>GHS08 | H225-304-315-332-336-361-373 |

### 4. First-Aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

## 5. Fire-Fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**Special Fire and Explosion Hazard (Combustible Dust):** No Information

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

| Chemical Name                                    | CAS-No.    | Weight %<br>Less Than | ACGIH TLV-<br>TWA | ACGIH TLV-<br>STEL | OSHA PEL-TWA | OSHA PEL-<br>CEILING |
|--|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Naphtha, Petroleum, Hydrotreated Light           | 64742-49-0 | 30.0                  | N.E.              | N.E.               | N.E.         | N.E.                 |
| Propane  | 74-98-6    | 20.0                  | N.E.              | N.E.               | 1000 ppm     | N.E.                 |
| n-Butane   | 106-97-8   | 10.0                  | N.E.              | 1000 ppm           | N.E.         | N.E.                 |
| Xylenes (o-, m-, p- isomers)                     | 1330-20-7  | 10.0                  | 100 ppm           | 150 ppm            | 100 ppm      | N.E.                 |
| Ethyl Acetate                                    | 141-78-6   | 10.0                  | 400 ppm           | N.E.               | 400 ppm      | N.E.                 |
| Methyl Acetate                                   | 79-20-9    | 10.0                  | 200 ppm           | 250 ppm            | 200 ppm      | N.E.                 |
| Ethylbenzene                                     | 100-41-4   | 5.0                   | 20 ppm            | N.E.               | 100 ppm      | N.E.                 |
| Octane   | 111-65-9   | 5.0                   | 300 ppm           | N.E.               | 500 ppm      | N.E.                 |
| n-Heptane  | 142-82-5   | 5.0                   | 400 ppm           | 500 ppm            | 500 ppm      | N.E.                 |
| bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 41556-26-7 | 1.0                   | N.E.              | N.E.               | N.E.         | N.E.                 |
| N-Methyl 2-Pyrrolidone                           | 872-50-4   | 1.0                   | N.E.              | N.E.               | N.E.         | N.E.                 |
| Methanol   | 67-56-1    | 1.0                   | 200 ppm           | 250 ppm            | 200 ppm      | N.E.                 |
| Toluene  | 108-88-3   | 1.0                   | 20 ppm            | N.E.               | 200 ppm      | 300 ppm              |

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

|                                 |                     |  |            |
|---------------------------------|---------------------|--|------------|
| <b>Appearance:</b>              | Aerosolized Mist    | <b>Physical State:</b>                         | Liquid     |
| <b>Odor:</b>                    | Solvent Like        | <b>Odor Threshold:</b>                         | N.E.       |
| <b>Relative Density:</b>        | 0.731               | <b>pH:</b>                                     | N.A.       |
| <b>Freeze Point, °C:</b>        | N.D.                | <b>Viscosity:</b>                              | N.D.       |
| <b>Solubility in Water:</b>     | Negligible          | <b>Partition Coefficient, n-octanol/water:</b> | N.D.       |
| <b>Decomposition Temp., °C:</b> | N.D.                | <b>Explosive Limits, vol%:</b>                 | 0.9 - 16.0 |
| <b>Boiling Range, °C:</b>       | -37 - 2,230         | <b>Flash Point, °C:</b>                        | -96        |
| <b>Flammability:</b>            | Supports Combustion | <b>Auto-ignition Temp., °C:</b>                | N.D.       |
| <b>Evaporation Rate:</b>        | Faster than Ether   | <b>Vapor Pressure:</b>                         | N.D.       |
| <b>Vapor Density:</b>           | Heavier than Air    |  |            |

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** May be absorbed through the skin in harmful amounts. May cause skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed. Poison, may be fatal or cause blindness if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B).

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

#### ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u>                             | <u>Oral LD50</u> | <u>Dermal LD50</u>  | <u>Vapor LC50</u> |
|----------------|--|------------------|---------------------|-------------------|
| 64742-49-0     | Naphtha, Petroleum, Hydrotreated Light           | >5000 mg/kg Rat  | >3160 mg/kg Rabbit  | >4951 mg/L Rat    |
| 106-97-8       | n-Butane   | N.E.             | N.E.                | 658 mg/L Rat      |
| 1330-20-7      | Xylenes (o-, m-, p- isomers)                     | 3500 mg/kg Rat   | >4350 mg/kg Rabbit  | 29.08 mg/L Rat    |
| 141-78-6       | Ethyl Acetate                                    | 5620 mg/kg Rat   | >18000 mg/kg Rabbit | N.E.              |
| 79-20-9        | Methyl Acetate                                   | >5000 mg/kg Rat  | >5000 mg/kg Rabbit  | >49 mg/L Rat      |
| 100-41-4       | Ethylbenzene                                     | 3500 mg/kg Rat   | 15400 mg/kg Rabbit  | 17.4 mg/L Rat     |
| 142-82-5       | n-Heptane  | N.E.             | 3000 mg/kg Rabbit   | 103 mg/L Rat      |
| 111-65-9       | Octane   | N.E.             | N.E.                | >23.36 mg/L Rat   |
| 41556-26-7     | bis(1,2,2,6,6-Pentamethyl-4-Piperidiny) Sebacate | 2615 mg/kg Rat   | N.E.                | N.E.              |
| 872-50-4       | N-Methyl 2-Pyrrolidone                           | 3914 mg/kg Rat   | 8000 mg/kg Rabbit   | 20 mg/L Rat       |
| 67-56-1        | Methanol   | 6200 mg/kg Rat   | 15840 mg/kg Rabbit  | N.E.              |
| 108-88-3       | Toluene  | 2600 mg/kg Rat   | 12000 mg/kg Rabbit  | 12.5 mg/L Rat     |

N.E. - Not Established

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Do not incinerate closed containers. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

## 14. Transport Information

|                              | <u>Domestic (USDOT)</u>                     | <u>International (IMDG)</u> | <u>Air (IATA)</u>   | <u>TDG (Canada)</u> |
|------------------------------|---|-----------------------------|---------------------|---------------------|
| <b>UN Number:</b>            | N.A.  | 1950                        | 1950                | N.A.                |
| <b>Proper Shipping Name:</b> | Paint and Related Spray Products in Ltd Qty | Aerosols                    | Aerosols, flammable | Aerosols            |
| <b>Hazard Class:</b>         | N.A.  | 2                           | 2.1                 | N.A.                |
| <b>Packing Group:</b>        | N.A.  | N.A.                        | N.A.                | N.A.                |
| <b>Limited Quantity:</b>     | Yes   | Yes                         | Yes                 | Yes                 |

## 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Acute Toxicity (any route of exposure), Reproductive toxicity, Skin Corrosion or Irritation, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
|----------------------|----------------|

|                              |           |
|------------------------------|-----------|
| Xylenes (o-, m-, p- isomers) | 1330-20-7 |
| Ethylbenzene                 | 100-41-4  |
| N-Methyl 2-Pyrrolidone       | 872-50-4  |
| Methanol                     | 67-56-1   |
| Toluene                      | 108-88-3  |

**Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

**U.S. State Regulations:****California Proposition 65:**

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other Information****HMIS RATINGS**

Health: 2\*      Flammability: 4      Physical Hazard: 0      Personal Protection: X

**NFPA RATINGS**

Health: 2      Flammability: 4      Instability: 0

Maximum Incremental Reactivity 1.44

SDS REVISION DATE: 2/7/2019

REASON FOR REVISION: Substance and/or Product Properties Changed in Section(s):  
02 - Hazard Identification  
03 - Composition/Information on Ingredients  
11 - Toxicological Information  
15 - Regulatory Information  
Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

# SAFETY DATA SHEET



Techspray E-LINE BLUE SHOWER Maintenance Cleaner

## Section 1. Identification

**GHS product identifier** : Techspray E-LINE BLUE SHOWER Maintenance Cleaner  
**Product code** : 1620-10S  
**Other means of identification** : Degreasers  
**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

**Supplier's details** : Techspray  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
Tel: 678-819-1408  
Toll free: 800-858-4043  
Fax: 806-372-8750

**Emergency telephone number (with hours of operation)** : Chemtrec - 1-800-424-9300  
CANUTEC (Canadian Transportation): (613) 996-6666  
Emergency phone: (800) 858-4043  
24/

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
GASES UNDER PRESSURE Compressed gas  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
Causes serious eye irritation.  
Contains gas under pressure; may explode if heated.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

**Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

## Section 2. Hazards identification

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Degreasers

| Ingredient name   | %         | CAS number |
|-------------------|-----------|------------|
| ethanol           | ≥10 - ≤25 | 64-17-5    |
| Isopropyl alcohol | ≥10 - ≤25 | 67-63-0    |
| methanol          | ≤3        | 67-56-1    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
carbonyl halides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### [Control parameters](#)

#### [Occupational exposure limits](#)

| Ingredient name   | Exposure limits   |
|-------------------|---|
| ethanol           | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 1000 ppm 15 minutes.<br><b>NIOSH REL (United States, 10/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 10 hours.<br>TWA: 1000 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 1900 mg/m <sup>3</sup> 8 hours.<br>TWA: 1000 ppm 8 hours.  |
| Isopropyl alcohol | <b>ACGIH TLV (United States, 3/2015).</b><br>STEL: 400 ppm 15 minutes.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 10 hours.<br>TWA: 400 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>STEL: 1225 mg/m <sup>3</sup> 15 minutes.<br>STEL: 500 ppm 15 minutes.<br>TWA: 980 mg/m <sup>3</sup> 8 hours.<br>TWA: 400 ppm 8 hours.  |
| methanol          | <b>ACGIH TLV (United States, 3/2015).</b><br><b>Absorbed through skin.</b><br>STEL: 328 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 262 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2013).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 10 hours.<br>TWA: 200 ppm 10 hours.<br><b>OSHA PEL (United States, 2/2013).</b><br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours.<br><b>OSHA PEL 1989 (United States, 3/1989).</b><br><b>Absorbed through skin.</b><br>STEL: 325 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 260 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours. |

### [Appropriate engineering controls](#)

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

|  |  |
|--|--|
| <b>Environmental exposure controls</b> | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.   |
| <b>Individual protection measures</b>  |  |
| <b>Hygiene measures</b>                | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.  |
| <b>Eye/face protection</b>             | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.   |
| <b>Skin protection</b>                 |  |
| <b>Hand protection</b>                 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>                 | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.  |
| <b>Other skin protection</b>           | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b>          | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |

## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Appearance</b>                                   |  |
| <b>Physical state</b>                               | : Liquid.  |
| <b>Color</b>  | : Clear. Colorless.  |
| <b>Odor</b>   | : Characteristic.  |
| <b>Odor threshold</b>                               | : Not available.   |
| <b>pH</b>   | : Not applicable.  |
| <b>Melting point</b>                                | : Not available.   |
| <b>Boiling point</b>                                | : Not available.   |
| <b>Flash point</b>                                  | : Not available.   |
| <b>Evaporation rate</b>                             | : >1 ((TCE=1) = 1)   |
| <b>Flammability (solid, gas)</b>                    | : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. |
| <b>Lower and upper explosive (flammable) limits</b> | : Lower: 1.1%<br>Upper: 6.7%   |
| <b>Vapor pressure</b>                               | : 7.4 kPa (55.5 mm Hg) [room temperature]  |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : Not available.   |
| <b>Solubility</b>                                   | : Not available.   |

## Section 9. Physical and chemical properties

|   |                  |
|---|------------------|
| <b>Solubility in water</b>                    | : Not available. |
| <b>Partition coefficient: n-octanol/water</b> | : Not available. |
| <b>Auto-ignition temperature</b>              | : Not available. |
| <b>Decomposition temperature</b>              | : Not available. |
| <b>Viscosity</b>                              | : Not available. |
| <b>Flow time (ISO 2431)</b>                   | : Not available. |
| <b><u>Aerosol product</u></b>                 |                  |
| <b>Type of aerosol</b>                        | : Spray          |
| <b>Heat of combustion</b>                     | : 30.26 kJ/g     |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| <b>Chemical stability</b>                 | : The product is stable.   |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame).   |
| <b>Incompatible materials</b>             | : No specific data.  |
| <b>Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result                | Species | Dose                     | Exposure |
|-------------------------|-----------------------|---------|--------------------------|----------|
| ethanol                 | LC50 Inhalation Vapor | Rat     | 124700 mg/m <sup>3</sup> | 4 hours  |
| Isopropyl alcohol       | LD50 Oral             | Rat     | 7 g/kg                   | -        |
|                         | LD50 Dermal           | Rabbit  | 12800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5000 mg/kg               | -        |
| methanol                | LC50 Inhalation Gas.  | Rat     | 145000 ppm               | 1 hours  |
|                         | LC50 Inhalation Gas.  | Rat     | 64000 ppm                | 4 hours  |
|                         | LD50 Dermal           | Rabbit  | 15800 mg/kg              | -        |
|                         | LD50 Oral             | Rat     | 5600 mg/kg               | -        |

#### Irritation/Corrosion

| Product/ingredient name | Result                   | Species | Score | Exposure                           | Observation |
|-------------------------|--------------------------|---------|-------|------------------------------------|-------------|
| ethanol                 | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 milligrams            | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 0.066666667 minutes 100 milligrams | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 100 microliters                    | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 500 milligrams                     | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 400 milligrams                     | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20 milligrams             | -           |
| Isopropyl alcohol       | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100                       | -           |

## Section 11. Toxicological information

|          |                          |        |   |               |   |
|----------|--------------------------|--------|---|---------------|---|
| methanol | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          | Eyes - Severe irritant   | Rabbit | - | 10 milligrams | - |
|          |                          |        |   | 100           | - |
|          | Skin - Mild irritant     | Rabbit | - | milligrams    | - |
|          |                          |        |   | 500           | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 24 hours 100  | - |
|          | Eyes - Moderate irritant | Rabbit | - | milligrams    | - |
|          |                          |        |   | 40 milligrams | - |
|          | Skin - Moderate irritant | Rabbit | - | 24 hours 20   | - |
|          |                          |        |   | milligrams    | - |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA  | IARC | NTP |
|-------------------------|-------|------|-----|
| ethanol                 | -     | 1    | -   |
| Isopropyl alcohol       | -     | 3    | -   |
| methanol                | None. | -    | -   |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : May cause skin irritation.
- Ingestion** : Do not ingest. If swallowed then seek immediate medical assistance.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

## Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
central nervous system depression  
nausea or vomiting  
Ingestion Seek medical attention.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route | ATE value     |
|-------|---------------|
| Oral  | 39113.6 mg/kg |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result  | Species                                    | Exposure |
|-------------------------|---|--|----------|
| ethanol                 | Acute EC50 17.921 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute EC50 2000 µg/l Fresh water                | Daphnia - Daphnia magna                    | 48 hours |
|                         | Acute LC50 25500 µg/l Marine water              | Crustaceans - Artemia franciscana - Larvae | 48 hours |
|                         | Acute LC50 42000 µg/l Fresh water               | Fish - Oncorhynchus mykiss                 | 4 days   |
|                         | Chronic NOEC 4.995 mg/l Marine water            | Algae - Ulva pertusa                       | 96 hours |
|                         | Chronic NOEC 100 µl/L Fresh water               | Daphnia - Daphnia magna - Neonate          | 21 days  |
|                         | Chronic NOEC 0.375 µl/L Fresh water             | Fish - Gambusia holbrooki - Larvae         | 12 weeks |
| Isopropyl alcohol       | Acute LC50 1400000 to 1950000 µg/l Marine water | Crustaceans - Crangon crangon              | 48 hours |
| methanol                | Acute LC50 4200 mg/l Fresh water                | Fish - Rasbora heteromorpha                | 96 hours |
|                         | Acute EC50 16.912 mg/l Marine water             | Algae - Ulva pertusa                       | 96 hours |
|                         | Acute LC50 2500000 µg/l Marine water            | Crustaceans - Crangon crangon -            | 48 hours |

## Section 12. Ecological information

|  |  |  |          |
|--|--|--|----------|
|  | Acute LC50 3289 to 4395 mg/l Fresh water | Adult<br>Daphnia - Daphnia magna - Neonate | 48 hours |
|  | Acute LC50 290 mg/l Fresh water          | Fish - Danio rerio - Egg                   | 96 hours |
|  | Chronic NOEC 9.96 mg/l Marine water      | Algae - Ulva pertusa                       | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name | LogP <sub>ow</sub> | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| ethanol                 | -0.35              | -   | low       |
| Isopropyl alcohol       | 0.05               | -   | low       |
| methanol                | -0.77              | <10 | low       |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.





### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                       | CAS #   | Status | Reference number |
|----------------------------------|---------|--------|------------------|
| Methanol (I); Methyl alcohol (I) | 67-56-1 | Listed | U154             |

## Section 14. Transport information

|                         | DOT Classification          | TDG Classification          | Mexico Classification       | ADR/RID                | IMDG   | IATA  |
|-------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------|--|---|
| UN number               | -                           | -                           | -                           | UN1950                 | UN1950   | ID8000  |
| UN proper shipping name | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Consumer commodity<br>ORM-D | Aerosols,<br>flammable | AEROSOLS IN LIMITED QUANTITIES OF CLASS 2 (heptane, 1, 1-difluoroethane) | Consumer commodity<br>ORM-D<br>ID8000 (ethanol) |
|                         |                             |                             |                             |                        |  |   |

## Section 14. Transport information

|                                   |   |   |       |  |  |  |
|-----------------------------------|---|---|-------|--|--|--|
| <b>Transport hazard class(es)</b> | ORM-D   | ORM-D   | ORM-D | 2<br><br>                                | 2.1<br> | 9<br>                 |
| <b>Packing group</b>              | -   | -   | -     | II   | II   | -  |
| <b>Environmental hazards</b>      | Yes.  | No.   | No.   | Yes.   | No.  | No.  |
| <b>Additional information</b>     | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). | -     | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><br><b><u>Hazard identification number</u></b><br>UN1950<br><br><b><u>Tunnel code</u></b><br>(D) | -  | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** heptane  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Air Act (CAA) 112 regulated flammable substances:** 1,1-difluoroethane

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Fire hazard  
Sudden release of pressure  
Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

| Name              | %         | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|-------------------|-----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| ethanol           | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | Yes.                            |
| Isopropyl alcohol | ≥10 - ≤25 | Yes.        | No.                        | No.      | Yes.                            | No.                             |
| methanol          | ≤3        | Yes.        | No.                        | No.      | Yes.                            | No.                             |

### SARA 313

|  | Product name                  | CAS number         | %               |
|--|-------------------------------|--------------------|-----------------|
| <b>Form R - Reporting requirements</b> | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |
| <b>Supplier notification</b>           | Isopropyl alcohol<br>methanol | 67-63-0<br>67-56-1 | ≥10 - ≤25<br>≤3 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: HEPTANE; N-HEPTANE; DIFLUOROETHANE; ETHYL ALCOHOL; DENATURED ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHANOL; METHYL ALCOHOL
- New York** : The following components are listed: Methanol
- New Jersey** : The following components are listed: n-HEPTANE; HEPTANE; 1,1-DIFLUOROETHANE; ETHANE, 1,1-DIFLUORO-; ETHYL ALCOHOL; ALCOHOL; ISOPROPYL ALCOHOL; 2-PROPANOL; METHYL ALCOHOL; METHANOL
- Pennsylvania** : The following components are listed: HEPTANE; DENATURED ALCOHOL; ETHANOL; ISOPROPYL ALCOHOL MANUFACTURE (STRONG-ACID PROCESS); METHANOL

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name     | Cancer     | Reproductive | No significant risk level | Maximum acceptable dosage level                              |
|---------------------|------------|--------------|---------------------------|--|
| ethanol<br>methanol | No.<br>No. | No.<br>Yes.  | Yes.<br>No.               | No.<br>23000 µg/day (ingestion)<br>47000 µg/day (inhalation) |

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

## Section 15. Regulatory information

### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### International lists

#### National inventory

|                          |   |
|--------------------------|---|
| <b>Australia</b>         | : All components are listed or exempted.  |
| <b>Canada</b>            | : All components are listed or exempted.  |
| <b>China</b>             | : All components are listed or exempted.  |
| <b>Europe</b>            | : All components are listed or exempted.  |
| <b>Japan</b>             | : <b>Japan inventory (ENCS):</b> All components are listed or exempted.<br><b>Japan inventory (ISHL):</b> Not determined. |
| <b>Malaysia</b>          | : Not determined.   |
| <b>New Zealand</b>       | : All components are listed or exempted.  |
| <b>Philippines</b>       | : All components are listed or exempted.  |
| <b>Republic of Korea</b> | : All components are listed or exempted.  |
| <b>Taiwan</b>            | : All components are listed or exempted.  |
| <b>Turkey</b>            | : All components are listed or exempted.  |

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 3 |
| Physical hazards |   | 0 |
|                  |   |   |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

## Section 16. Other information

| Classification  | Justification  |
|---|--|
| FLAMMABLE AEROSOLS - Category 1<br>GASES UNDER PRESSURE - Compressed gas<br>SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>CARCINOGENICITY - Category 1A | On basis of test data<br>On basis of test data<br>Calculation method<br>Calculation method<br>Calculation method |

### History

**Date of printing** : 8/15/2019

**Date of issue/Date of revision** : 8/15/2019

**Date of previous issue** : 8/15/2019

**Version** : 2

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Prepared according to Global Harmonized System (GHS) standards

## SECTION 1

## CHEMICAL PRODUCT IDENTIFICATION

Lubrication Technologies, Inc.  
900 Mendelssohn Avenue North  
Golden Valley, MN 55427-4309  
Tel: 763-545-0707

Product Trade Name: **Viking Drill Ultra S/P<sup>TM</sup> Super Premium**

CAS Number: Mixture

Synonyms/Other: Norseman Drill Ultra S/P<sup>TM</sup> Super Premium

Part Number(s): N/A

Recommended Use: Metal working fluid

Restrictions on Use: Not determined

Created Date: 9/16/2015

Preparation/Revision Date: 9/28/2015

Emergency Phone Number: 1-800-424-9300 (CHEMTREC)

SDS CODE: 10376

## SECTION 2

## HAZARD IDENTIFICATION

Appearance: Yellow Liquid

Odor: Mild Petroleum

Classification: This material is not considered to be hazardous according to the Globally Harmonized System of Classification and Labelling Chemicals (GHS), Third Revised Edition.

Target Organs: Not applicable.

Pictogram(s):

Signal Word: None required.

Hazard Statement: None required.

Other Hazards: Not determined.

Prevention: None required.

Response: None required.

Storage Procedures: None required.

Disposal: None required.

Other: See section 11 for complete health hazard information.

## SECTION 3

## COMPOSITION OF INGREDIENTS

| Component               | CAS Number | Percentage (by weight) |
|-------------------------|------------|------------------------|
| Alkanes, C20-28, Chloro | 63449-39-8 | 90-100%                |

The balance of components do not contribute to the overall classification of the fluid, according to the GHS Standard.

## SECTION 4

## FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Eye Contact:</b>  | If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 5 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention. |
| <b>Skin Contact:</b> | Call a doctor if you feel unwell.  |
| <b>Inhalation:</b>   | Get medical advice or attention if you feel unwell or are concerned.   |
| <b>Ingestion:</b>    | If you feel unwell or concerned: Get medical advice/attention. Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.            |
| <b>Other:</b>        | No additional information  |

## SECTION 5

## FIRE FIGHTING MEASURES

|  |   |
|--|---|
| <b>Flash Point:</b>                          | 200°C by Cleveland Open Cup Tester.   |
| <b>Flammable limits:</b>                     | Not determined.   |
| <b>Extinguishing media:</b>                  | Use dry chemical, alcohol foam, all purpose AFFF or carbon dioxide to extinguish fire.  |
| <b>Special firefighting procedures:</b>      | DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). |
| <b>Unusual fire &amp; explosion hazards:</b> | Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.  |
| <b>Byproducts of combustion:</b>             | Fires involving this product may release oxides of carbon, phosphorus, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.  |
| <b>Autoignition temperature:</b>             | Not determined.   |
| <b>Explosion data:</b>                       | Not determined. Care should always be exercised in dust/mist areas.   |
| <b>Other:</b>                                | Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.  |

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

|  |  |
|--|--|
| <b>Spill control procedures (land):</b>  | Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300). |
| <b>Spill control procedures (water):</b> | Try to contain large spills with floating booms to prevent spill from spreading. Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities (normally the National Response Center or Coast Guard at 800-424-8802).   |
| <b>Waste disposal method:</b>            | Do not empty into drains. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.  |
| <b>Other:</b>                            | CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.  |

## SECTION 7

## HANDLING AND STORAGE

|                                |   |
|--------------------------------|---|
| <b>Handling procedures:</b>    | Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.<br>Handling temperatures should not exceed 60°C (140°F) to minimize danger of burns. Open containers carefully in a well ventilated area or use appropriate respiratory protection. Wash thoroughly after handling. |
| <b>Storage procedures:</b>     | Store containers away from heat, sparks, open flame, or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.   |
| <b>Additional information:</b> | No additional information.  |

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits/standards for materials that can be formed when handling this product:

|                         | OSHA TWA | OSHA STEL | ACGIH TWA |
|-------------------------|----------|-----------|-----------|
| Alkanes, C20-28, Chloro | n/a      | n/a       | n/a       |

TWA – Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.

STEL – Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

All base oils, including additive carriers, contain <3.0% DMSO extractable material.

|                                |  |
|--------------------------------|--|
| <b>Personal protection:</b>    | Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.  |
| <b>Respiratory protection:</b> | None required if ventilation is adequate. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.   |
| <b>Eye protection:</b>         | Eye protection is strongly recommended. Wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).  |
| <b>Hand protection:</b>        | Impervious, chemically resistant gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.   |
| <b>Other protection:</b>       | Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended based on level of activity and exposure. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.   |
| <b>Local control measures:</b> | Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure. Eyewash stations and showers should be available in areas where this material is used and stored. |
| <b>Other:</b>                  | Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.   |

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

|                                   |   |
|-----------------------------------|---|
| <b>Appearance:</b>                | Yellow Liquid   |
| <b>Odor:</b>                      | Mild Petroleum  |
| <b>Odor threshold:</b>            | Not determined.   |
| <b>pH:</b>                        | Not applicable.   |
| <b>Melting/Freezing point:</b>    | Not determined.   |
| <b>Initial boiling point:</b>     | Not determined.   |
| <b>Boiling range:</b>             | Not determined.   |
| <b>Flash point:</b>               | 200°C.  |
| <b>Evaporation rate:</b>          | Not determined.   |
| <b>Flammability:</b>              | Not determined.   |
| <b>Upper flammable limit:</b>     | Not determined.   |
| <b>Lower flammable limit:</b>     | Not determined.   |
| <b>Vapor pressure:</b>            | Not determined.   |
| <b>Vapor density:</b>             | Not determined.   |
| <b>Relative density:</b>          | 1.1 - 1.3 g/cm <sup>3</sup> @ 25 C                        |
| <b>Solubility:</b>                | Negligible in water, miscible in most petroleum solvents. |
| <b>Partition Coefficient:</b>     | Not determined.   |
| <b>Auto-ignition temperature:</b> | Not determined.   |
| <b>Decomposition temperature:</b> | Not determined.   |
| <b>Viscosity:</b>                 | 960 cSt at 40°C.  |
| <b>Other</b>                      | Not applicable.   |

## SECTION 10

## STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>Reactivity</b>                            |  |
| <b>Chemical stability:</b>                   | Material is chemically stable at room temperatures and pressure.   |
| <b>Hazardous polymerization:</b>             | Will not occur.  |
| <b>Conditions to avoid:</b>                  | Avoid high temperatures and product contamination.   |
| <b>Incompatibility with other materials:</b> | Avoid contact with acids and strong oxidizing materials.   |
| <b>Decomposition products:</b>               | Smoke, carbon monoxide, carbon dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and irritating vapors. |
| <b>Other:</b>                                | Not applicable.  |

## SECTION 11

## TOXICOLOGICAL INFORMATION

**Acute toxicity (LD50) \*See note at the bottom of the section**

|                                   |  |
|-----------------------------------|--|
| <b>Oral:</b>                      | >5000 mg/kg                                |
| <b>Dermal:</b>                    | >5000 mg/kg                                |
| <b>Inhalation:</b>                | >20.0 mg/l                                 |
| <b>Skin irritation:</b>           | Non-irritant                               |
| <b>Eye irritation:</b>            | Non-irritant                               |
| <b>Dermal sensitization:</b>      | Not expected to have a sensitizing effect. |
| <b>Respiratory sensitization:</b> | Not expected to have a sensitizing effect. |
| <b>Aspiration Hazard:</b>         | Not applicable                             |

#### Chronic Toxicity

|                                |   |
|--------------------------------|---|
| <b>Mutagenicity:</b>           | Not suspected of causing genetic defects  |
| <b>Carcinogenicity:</b>        | Not suspected of causing cancer.  |
| <b>Reproductive toxicity:</b>  | Not expected to have adverse effects on reproduction.   |
| <b>STOT-single exposure:</b>   | Not expected to have adverse effects.   |
| <b>STOT-repeated exposure:</b> | Not expected to have long term adverse effects.   |
| <b>Other:</b>                  | *All data in this section is based off calculations from Part 3 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components. |

## SECTION 12

## ECOLOGICAL INFORMATION

#### Environmental toxicity

|                                   |   |
|-----------------------------------|---|
| <b>Fish:</b>                      | > 100 mg/l.   |
| <b>Invertebrates:</b>             | > 100 mg/l.   |
| <b>Aquatic plants:</b>            | > 100 mg/l.   |
| <b>Microorganism:</b>             | > 100 mg/l.   |
| <b>Persistence/Degradability:</b> | This product is not expected to be readily biodegradable.   |
| <b>Bioaccumulation:</b>           | Not determined.   |
| <b>Mobility in soil:</b>          | Not determined.   |
| <b>Other:</b>                     | All classifications are based on calculations in Part 4 of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) utilizing information from the constituent components. |

## SECTION 13

## DISPOSAL CONSIDERATIONS

|                        |  |
|------------------------|--|
| <b>Waste disposal:</b> | This product unadulterated by other materials can be classified as a non-hazardous waste. Depending on use, used product may be regulated. Dispose of in a licensed facility. Do not discharge product in to sewer system. Dispose of containers by crushing or puncturing, so as to prevent unauthorized use of used containers. Waste management should be in full compliance with federal, state, and local laws. |
| <b>Other</b>           | The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.   |

## SECTION 14

## TRANSPORT INFORMATION

|                              |                                   |
|------------------------------|-----------------------------------|
| <b>Land Transport (DOT):</b> | Not regulated for land transport. |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Land Transport (TDG):</b> | Not regulated for land transport. |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Sea Transport (IMDG):</b> | Not regulated for sea transport.  |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Air Transport (IATA):</b> | Not regulated for air transport.  |
| <b>Proper Shipping Name:</b> | Not applicable.                   |
| <b>Other:</b>                | Not applicable.                   |

## SECTION 15

## REGULATORY INFORMATION

### Federal Regulation

#### **Clean water act/oil:**

Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spill or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

#### **TSCA:**

All components of this material are listed in the U.S. TSCA Inventory.

#### **Other TSCA:**

Not applicable.

#### **SARA title III:**

Section 302/304 extremely hazardous substances:

None.

Section 311, 312 hazard categorization:

|                                    |    |
|------------------------------------|----|
| Acute (immediate health effects):  | NO |
| Chronic (delayed health effects):  | NO |
| Fire (hazard):                     | NO |
| Reactivity (hazard):               | NO |
| Pressure ( sudden release hazard): | NO |

Section 313 toxic chemicals:

No components present are at or greater than the de minimis (minimum reportable) concentration requirements for reporting.

#### **CERCLA:**

For stationary/moving sources – reportable quantity (due to): Not hazardous due to the petroleum exclusion.

### State Regulations

#### **Right-to-know**

Not determined.

#### **Other:**

A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

## SECTION 16

## OTHER INFORMATION

|                          | <b>NFPA 704</b> | <b>NPCA-HMIS</b> | <b>KEY</b>   |
|--------------------------|-----------------|------------------|--------------|
| <b>HEALTH:</b>           | 0               | 0                | 0 = Minimal  |
| <b>FIRE:</b>             | 0               | 0                | 1 = Slight   |
| <b>REACTIVITY:</b>       | 0               | 0                | 2 = Moderate |
| <b>SPECIFIC HAZARD:</b>  | None            | N/A              | 3 = Serious  |
| <b>PROTECTION INDEX:</b> | N/A             | B                | 4 = Severe   |

Version: II

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#### Revisions / Comments:

None. 09/16/2015

Update to Product Trade Name and Synonyms/Other. 9/28/2015



## Safety Data Sheet California CARB Compliant

### 1 - Identification

|   |   |
|---|---|
| <b>Product Name:</b> WD-40 Multi-Use Product Aerosol  | <b>Manufacturer:</b> WD-40 Company  |
| <b>Product Use:</b> Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion | <b>Address:</b> 9715 Businesspark Avenue<br>San Diego, California, USA<br>92131           |
| <b>Restrictions on Use:</b> None identified   | <b>Telephone:</b>   |
| <b>SDS Date Of Preparation:</b> August 2, 2021  | <b>Emergency:</b> 1-888-324-7596  |
|   | <b>Information:</b> 1-888-324-7596  |
|   | <b>Chemical Spills:</b> 1-800-424-9300 (Chemtrec)<br>1-703-527-3887 (International Calls) |

### 2 – Hazards Identification

#### Hazcom 2012/GHS Classification:

Flammable Aerosol Category 1

Gas Under Pressure: Compressed Gas

Aspiration Toxicity Category 1

Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

#### Label Elements:



#### DANGER!

Extremely Flammable Aerosol.

Contains gas under pressure; may explode if heated.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

#### Prevention

Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing vapors or mists.

Use only outdoors or in a well-ventilated area.

#### Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

#### Storage

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

#### Disposal

Dispose of contents and container in accordance with local and national regulations.

### 3 - Composition/Information on Ingredients

| Ingredient                | CAS #  | Weight Percent | US Hazcom 2012/ GHS Classification  |
|---------------------------|--|----------------|---|
| LVP Aliphatic Hydrocarbon | 64742-47-8   | 45-50%         | Aspiration Toxicity Category 1  |
| Petroleum Base Oil        | 64742-56-9<br>64742-65-0<br>64742-53-6<br>64742-54-7<br>64742-71-8 | <35%           | Not Hazardous   |
| Aliphatic Hydrocarbon     | 64742-47-8   | <25%           | Flammable Liquid Category 3<br>Aspiration Toxicity Category 1<br>Specific Target Organ Toxicity<br>Single Exposure Category 3<br>(nervous system effects) |
| Carbon Dioxide            | 124-38-9   | 2-3%           | Simple Asphyxiant<br>Gas Under Pressure,<br>Compressed Gas  |

Note: The specific chemical identity and exact percentages are a trade secret.

### 4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Signs and Symptoms of Exposure:** Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness and other nervous system effects. Skin contact may cause drying of the skin.

**Indication of Immediate Medical Attention/Special Treatment Needed:** Immediate medical attention is needed for ingestion.

### 5 – Fire Fighting Measures

**Suitable (and unsuitable) Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Specific Hazards Arising from the Chemical:** Extremely flammable aerosol. Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

**Special Protective Equipment and Precautions for Fire-Fighters:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

### 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

**Methods and Materials for Containment/Cleanup:** Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

### 7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

**Conditions for Safe Storage:** Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

## 8 – Exposure Controls/Personal Protection

| Chemical                  | Occupational Exposure Limits  |
|---------------------------|---|
| LVP Aliphatic Hydrocarbon | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended)   |
| Petroleum Base Oil        | 5 mg/m <sup>3</sup> TWA (Inhalable) ACGIH TLV (as Mineral oil)<br>5 mg/m <sup>3</sup> TWA OSHA PEL (as Oil mist, mineral) |
| Aliphatic Hydrocarbon     | 1200 mg/m <sup>3</sup> TWA (manufacturer recommended)   |
| Carbon Dioxide            | 5000 ppm TWA, 30,000 ppm STEL ACGIH TLV<br>5000 ppm TWA OSHA PEL  |

### The Following Controls are Recommended for Normal Consumer Use of this Product

**Appropriate Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact. Always spray away from your face.

**Skin Protection:** Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Appropriate Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

**Personal Protection:**

**Eye Protection:** Safety goggles recommended where eye contact is possible.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

## 9 – Physical and Chemical Properties

|                            |                                      |   |                        |
|----------------------------|--------------------------------------|---|------------------------|
| Appearance:                | Light green to amber liquid          | Flammable Limits: (Solvent Portion)     | LEL: 0.6% UEL: 8%      |
| Odor:                      | Mild petroleum odor                  | Vapor Pressure:                         | 95-115 PSI @ 70°F      |
| Odor Threshold:            | Not established                      | Vapor Density:                          | Greater than 1 (air=1) |
| pH:                        | Not Applicable                       | Relative Density:                       | 0.8 – 0.82 @ 60°F      |
| Melting/Freezing Point:    | Not established                      | Solubilities:                           | Insoluble in water     |
| Boiling Point/Range:       | 361 - 369°F (183 - 187°C)            | Partition Coefficient; n-octanol/water: | Not established        |
| Flash Point:               | 138°F (59°C) Tag Closed Cup (liquid) | Autoignition Temperature:               | Not established        |
| Evaporation Rate:          | Not established                      | Decomposition Temperature:              | Not established        |
| Flammability (solid, gas): | Flammable Aerosol                    | Viscosity:                              | 2.79-2.96 cSt @ 100°F  |
| VOC:                       | 24.1%                                | Pour Point:                             | -63°C (-81.4°F) ASTM   |

|  |                  |  |      |
|--|------------------|--|------|
|  | MIR=0.43gO3/gVOC |  | D-97 |
|--|------------------|--|------|

## 10 – Stability and Reactivity

**Reactivity:** Not reactive under normal conditions

**Chemical Stability:** Stable

**Possibility of Hazardous Reactions:** May react with strong oxidizers generating heat.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

## 11 – Toxicological Information

**Symptoms of Overexposure:**

**Inhalation:** High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

**Skin Contact:** Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

**Eye Contact:** Contact may be irritating to eyes. May cause redness and tearing.

**Ingestion:** This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.

**Chronic Effects:** None expected.

**Carcinogen Status:** None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

**Reproductive Toxicity:** None of the components is considered a reproductive hazard.

**Numerical Measures of Toxicity:**

Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

## 12 – Ecological Information

**Ecotoxicity:** No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms

**Persistence and Degradability:** Components are readily biodegradable.

**Bioaccumulative Potential:** Bioaccumulation is not expected based on an assessment of the ingredients.

**Mobility in Soil:** No data available

**Other Adverse Effects:** None known

## 13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

## 14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty

(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

## 15 – Regulatory Information

### U.S. Federal Regulations:

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

### SARA TITLE III:

**Hazard Category For Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification.

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory.

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):** This product does not require a California Proposition 65 warning.

**VOC Regulations:** This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

**Canadian Environmental Protection Act:** All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

## 16 – Other Information

### HMIS Hazard Rating:

**Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)**

Revision Date: August 2, 2021

Supersedes: March 5, 2019

Revision Summary: Section 9: Appearance

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski

Regulatory Affairs Dept.

1012200/No.0084706

CUSTOMER: 381510  
BATCH #: 2039495  
PICK ZONE: AER2  
PRODUCT NAME: X-433, MM

ORDER #: 3711065  
DELIVERY ID: 15415987  
PICK SEQUENCE #: 22  
BARCODE #: 12061189

## Safety Data Sheet X-433, MM

Supersedes Date 10/22/2013

Issuing Date 01/12/2016

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name X-433, MM  
Recommended use Lubricant  
Information on Manufacturer  
CERTIFIED LABS, DIV. OF NCH CORP.  
BOX 152170  
IRVING, TEXAS 75015

Product Code 12061189  
Chemical nature Aerosol  
Emergency Telephone Number  
CHEMTREC® 800-424-9300  
Telephone inquiry  
972-579-2477

### 2. HAZARD IDENTIFICATION

Color Gray

Physical state liquid

Odor Solvent

#### GHS

##### Classification

##### Physical Hazards

Flammable Aerosols  
Gases under pressure

Category 2  
Compressed Gas

##### Health Hazard

Aspiration Toxicity  
Specific target organ systemic toxicity (single exposure)  
Specific target organ toxicity (repeated exposure)

Category 1  
Category 3  
Category 2

##### Other hazards

None

#### Labeling

##### Signal Word

DANGER



##### Hazard statements

H223 - Flammable aerosol  
H336 - May cause drowsiness or dizziness  
H304 - May be fatal if swallowed and enters airways  
H373 - May cause damage to organs through prolonged or repeated exposure  
H280 - Contains gas under pressure; may explode if heated

##### Precautionary Statements

P210 - Keep away from heat, sparks, open flames or hot surfaces.  
P211 - Do not spray on an open flame or other ignition source  
P251 - Pressurized container: Do not pierce or burn, even after use  
P270 - Do not eat, drink or smoke when using this product.  
P260 - Do not breathe vapors, mist or gas.  
P271 - Use in a well-ventilated area.  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a physician if unwell.  
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.  
P410 + P403 - Protect from sunlight. Store in a well-ventilated place  
P412 - Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents and container in accordance with applicable local regulations.

42 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component  | CAS No.    | Weight % * |
|--|------------|------------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)    | 64742-52-5 | 15-40      |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)    | 64742-53-6 | 15-40      |
| Petrolatum   | 8009-03-8  | 7-13       |
| Sodium sulfonate   | 68608-26-4 | 5-10       |
| Isobutane  | 75-28-5    | 5-10       |
| Propane  | 74-98-6    | 1-5        |
| Polybutene   | 9003-29-6  | 1-5        |
| Stoddard solvent   | 8052-41-3  | 1-5        |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | 64742-65-0 | 1-5        |
| Hexylene glycol  | 107-41-5   | 1-5        |
| 1,2,4- Trimethylbenzene  | 95-63-6    | 0.1-1      |

\*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. FIRST AID MEASURES

|                           |   |
|---------------------------|---|
| <b>General advice</b>     | Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, or gas.   |
| <b>Eye Contact</b>        | Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.                         |
| <b>Skin Contact</b>       | Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.  |
| <b>Inhalation</b>         | Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| <b>Ingestion</b>          | Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.  |
| <b>Notes to physician</b> | Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.                                  |

### 5. FIRE-FIGHTING MEASURES

|   |                               |                       |
|---|-------------------------------|-----------------------|
| <b>Flash Point</b> 201.2 °F / 94 °C   | <b>Method</b> Seta closed cup |                       |
| <b>Flammability Limits in Air %:</b> Mixture.   | <b>Upper:</b> 9.5             | <b>Lower:</b> 0.9     |
| <b>Suitable Extinguishing Media</b>   |                               |                       |
| Foam. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Water spray. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |                               |                       |
| <b>Specific hazards arising from the chemical</b>   |                               |                       |
| Material can create slippery conditions. Flame extension: 9.8 inches / 25 cm and Burnback: 0 inch / 0 cm.   |                               |                       |
| <b>Protective Equipment and Precautions for Firefighters</b>  |                               |                       |
| As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.   |                               |                       |
| <b>Aerosol Level (NFPA 30B) -</b>   | <b>3</b>                      |                       |
| <b>NFPA</b>   | <b>Health 2</b>               | <b>Flammability 4</b> |
| <b>HMIS</b>   | <b>Health 2</b>               | <b>Flammability 4</b> |
|   |                               | <b>Instability 0</b>  |
|   |                               | <b>Instability 0</b>  |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |   |
|----------------------------------|---|
| <b>Personal Precautions</b>      | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Material can create slippery conditions.                             |
| <b>Environmental Precautions</b> | Do not flush into surface water or sanitary sewer system.   |
| <b>Methods for Containment</b>   | Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). |
| <b>Methods for Cleaning Up</b>   | Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.   |
| <b>Neutralizing Agent</b>        | Not applicable.   |

### 7. HANDLING AND STORAGE

|                     |  |              |         |         |                |
|---------------------|--|--------------|---------|---------|----------------|
| Handling            | Ensure adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas. Wear personal protective equipment. |              |         |         |                |
| Storage             | Store in original container. Keep in a dry, cool and well -ventilated place. Keep away from heat and sources of ignition.  |              |         |         |                |
| Storage Temperature | Minimum  | 35 °F / 2 °C |         | Maximum | 120 °F / 49 °C |
| Storage Conditions  | Indoor   | X            | Outdoor | Heated  | Refrigerated   |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

| Component  | ACGIH TLV   | OSHA PEL                                     | NIOSH  |
|--|---|--|--|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)    | TWA: 5 mg/m <sup>3</sup> ; STEL: 10 mg/m <sup>3</sup> | TWA: 5 mg/m <sup>3</sup>                     | No data available  |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)    | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Petrolatum   | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Isobutane  | STEL: 1000 ppm  | No data available                            | TWA: 800 ppm<br>TWA: 1900 mg/m <sup>3</sup>  |
| Propane  | TWA: 1000 ppm   | TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup> | 2100 ppm<br>TWA: 1000 ppm<br>TWA: 1800 mg/m <sup>3</sup>                                 |
| Polybutene   | 5 mg/m <sup>3</sup> as oil mist                       | 10 mg/m <sup>3</sup> as oil mist             | No data available  |
| Stoddard solvent   | TWA: 100 ppm  | TWA: 500 ppm<br>TWA: 2900 mg/m <sup>3</sup>  | 20000 mg/m <sup>3</sup><br>Ceiling: 1800 mg/m <sup>3</sup><br>TWA: 350 mg/m <sup>3</sup> |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>   | TWA: 5 mg/m <sup>3</sup>                     | No data available  |
| Hexylene glycol  | Ceiling: 25 ppm                                       | No data available                            | Ceiling: 25 ppm<br>Ceiling: 125 mg/m <sup>3</sup>  |
| 1,2,4- Trimethylbenzene  | TWA: 25 ppm   | No data available                            | TWA: 25 ppm<br>TWA: 125 mg/m <sup>3</sup>  |

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

### Personal Protective Equipment

#### Eye/Face Protection

Safety glasses with side -shields.

#### Skin Protection

Wear suitable protective clothing, Impervious gloves.

#### Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use. Wear protective gloves/clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                               |                           |                           |                   |
|-------------------------------|---------------------------|---------------------------|-------------------|
| Physical state                | liquid                    | Viscosity                 | Slight viscous    |
| Color                         | Gray                      | Odor                      | Solvent           |
| Odor Threshold                | Not applicable            | Appearance                | Opaque            |
| pH                            | Not applicable            | Specific Gravity          | 0.857             |
| Evaporation Rate              | 18.85 (Butyl acetate=1)   | Percent Volatile (Volume) | 23.7              |
| VOC Content (%)               | 17.2                      | VOC Content (g/L)         | 147.4             |
| Vapor Pressure                | 1762.54 mmHg @ 70°F       | Vapor Density             | 1.4 (Air = 1.0)   |
| Solubility                    | Negligible                | n-Octanol/Water Partition | No data available |
| Melting Point/Range           | No data available         | Decomposition Temperature | No data available |
| Boiling Point/Range           | No data available         | Flammability (solid, gas) | No data available |
| Flash Point                   | 201.2 °F / 94 °C          | Method                    | Seta closed cup   |
| Autoignition Temperature      | No information available. |                           |                   |
| Flammability Limits in Air %: | Mixture                   | Upper: 9.5 Lower: 0.9     |                   |

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable. Hazardous polymerization does not occur.

### Conditions to Avoid

Keep away from open flames, hot surfaces, and sources of ignition.

### Incompatible Products

Strong oxidizing agents, Strong acids, Aldehydes, Ketones.

### Decomposition Temperature

No data available

### Hazardous Decomposition Products

Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Aldehydes, Ketones.

### Possibility of Hazardous Reactions

None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

No information available.

The following values are calculated based on chapter 3.1 of the GHS document

|                 |                          |
|-----------------|--------------------------|
| Oral LD50       | 4,960.48                 |
| Dermal LD50     | 2,214.25                 |
| Inhalation LC50 |                          |
| Gas             | No information available |
| Mist            | No information available |
| Vapor           | No information available |

Principle Route of Exposure Inhalation, Skin contact, Eye contact, Ingestion.

Primary Routes of Entry Inhalation, Eye contact, Skin contact, Ingestion.

#### Acute Effects:

Eyes

Low hazard for usual industrial or commercial handling.

Skin

Low hazard for usual industrial or commercial handling.

Inhalation

May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes headache, drowsiness or other effects to the central nervous system. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

#### Chronic Toxicity

Repeated or prolonged exposure may cause central nervous system damage. Kidney injury may occur.

#### Target Organ Effects

Central nervous system, Heart, Liver, Kidney, Blood, Respiratory system, Immune system.

#### Aggravated Medical Conditions

Respiratory disorders, Neurological disorders, Skin disorders, Kidney disorders, Blood disorders.

#### Component Information

##### Acute Toxicity

| Component  | Oral LD50            | Dermal LD50             | Inhalation LC50                     | Draize Test       | Other             |
|--|----------------------|-------------------------|-------------------------------------|-------------------|-------------------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)<br>64742-52-5    | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | no data available                   | no data available | no data available |
| Petrolatum<br>8009-03-8  | no data available    | = 3600 mg/kg ( Rabbit ) | no data available                   | no data available | no data available |
| Isobutane<br>75-28-5   | no data available    | no data available       | = 658 mg/L ( Rat ) 4 h              | no data available | no data available |
| Propane<br>74-98-6   | no data available    | no data available       | = 658 mg/L ( Rat ) 4 h              | no data available | no data available |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)<br>64742-65-0 | >5000 mg/kg (rat)    | >5000 mg/kg (rabbit)    | no data available                   | no data available | no data available |
| Hexylene glycol<br>107-41-5  | = 3692 mg/kg ( Rat ) | no data available       | > 310 mg/m <sup>3</sup> ( Rat ) 1 h | no data available | no data available |
| 1,2,4- Trimethylbenzene<br>95-63-6   | = 3280 mg/kg ( Rat ) | > 3160 mg/kg ( Rabbit ) | = 18 g/m <sup>3</sup> ( Rat ) 4 h   | no data available | no data available |

##### Chronic Toxicity

| Component                          | Mutagenicity      | Sensitization     | Developmental Toxicity | Reproductive Toxicity | Target Organ Effects   |
|------------------------------------|-------------------|-------------------|------------------------|-----------------------|--|
| Isobutane<br>75-28-5               | no data available | no data available | no data available      | no data available     | Central nervous system   |
| Propane<br>74-98-6                 | no data available | no data available | no data available      | no data available     | Central nervous system   |
| Stoddard solvent<br>8052-41-3      | no data available | no data available | no data available      | no data available     | Skin Central nervous system<br>Eyes Respiratory system<br>Kidney |
| Hexylene glycol<br>107-41-5        | no data available | no data available | no data available      | no data available     | Skin Central nervous system<br>Eyes Respiratory system           |
| 1,2,4- Trimethylbenzene<br>95-63-6 | no data available | no data available | no data available      | no data available     | Blood Skin Central nervous system<br>Eyes Respiratory system     |

#### Carcinogenicity

There are no known carcinogenic chemicals in this product.

## 12. ECOLOGICAL INFORMATION

#### Product Information

No information available.

#### Component Information

| Component   | Toxicity to Algae         | Toxicity to Fish                          | Microtox                 | Crustacea                          | log Pow |
|---|---------------------------|---|--------------------------|------------------------------------|---------|
| Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h | No information available | 1000: 48 h Daphnia magna mg/L EC50 | N/A     |
| Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h | No information available | 1000: 48 h Daphnia magna mg/L EC50 | N/A     |

|  |                           |   |                          |   |         |
|--|---------------------------|---|--------------------------|---|---------|
| Isobutane  | No information available. | No information available.   | No information available | No information available.                 | 2.88    |
| Propane  | No information available. | No information available.   | No information available | No information available.                 | 2.3     |
| Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) | No information available. | LC50 > 5000 mg/L Oncorhynchus mykiss 96 h   | No information available | 1000: 48 h Daphnia magna mg/L EC50        | N/A     |
| Hexylene glycol  | No information available. | LC50 10500 - 11000 mg/L Pimephales promelas 96 h<br>LC50 = 10000 mg/L Lepomis macrochirus 96 h<br>LC50 = 8690 mg/L Pimephales promelas 96 h<br>LC50 = 10700 mg/L Pimephales promelas 96 h | EC50 = 3038 mg/L 5 min   | 2700 - 3700: 48 h Daphnia magna mg/L EC50 | 0.13986 |
| 1,2,4- Trimethylbenzene  | No information available. | LC50 7.19 - 8.28 mg/L Pimephales promelas 96 h<br>LC50 = 7.72 mg/L Pimephales promelas 96 h   | No information available | 6.14: 48 h Daphnia magna mg/L EC50        | 3.63    |

Persistence and Degradability  
Bioaccumulation  
Mobility

No information available.  
No information available.  
No information available.

### 13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.  
Container Disposal Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

### 14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Consumer commodity  
Hazard Class ORM-D  
Description Consumer commodity, ORM-D

TDG

Proper shipping name Aerosols  
Hazard Class 2.1  
UN-No UN1950  
Description UN1950, AEROSOLS, 2.1, LTD QTY

ICAO

UN-No UN1950  
Proper Shipping Name Aerosols  
Hazard Class 2.1  
Shipping Description UN1950, AEROSOLS, FLAMMABLE 2.1 LTD QTY

IATA

UN-No UN1950  
Proper Shipping Name Aerosols, flammable  
Hazard Class 2.1  
ERG-Code 10L  
Shipping Description UN1950, AEROSOLS, FLAMMABLE ,2.1 LTD QTY

IMDG/IMO

Proper Shipping Name Aerosols  
Hazard Class 2  
UN-No UN1950  
EmS No. F-D, S-U  
Description UN1950, AEROSOLS, ,2.1, LTD QTY

### 15. REGULATORY INFORMATION

Inventories

TSCA Complies  
DSL Complies  
U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals

which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Component               | CAS No. | Weight % * | SARA 313 - Threshold Values |
|-------------------------|---------|------------|-----------------------------|
| 1,2,4- Trimethylbenzene | 95-63-6 | 0.1-1      | 1.0                         |

**SARA 311/312 Hazardous Categorization**

| Acute Health Hazard | Chronic Health Hazard | Fire Hazard | Sudden Release of Pressure Hazard | Reactive Hazard |
|---------------------|-----------------------|-------------|-----------------------------------|-----------------|
| Yes                 | Yes                   | Yes         | Yes                               | No              |

CERCLA

**16. OTHER INFORMATION**

Prepared By Laura Strauss  
Supersedes Date 10/22/2013  
Issuing Date 01/12/2016  
Reason for Revision No information available.  
Glossary No information available.  
List of References. No information available.

**CERTIFIED LABS, DIV. OF NCH CORP.** assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

# Material Safety Data Sheet

24 Hour Assistance:  
1-847-367-7700

Rust-Oleum Corp.  
www.rustoleum.com

## 1. Identification

**Product Name:** OKON Multi-Surface Water Repellent Sealer **Revision Date:** 11/8/2012

**Identification Number:** OK930, 931, 935

**Product Use/Class:** Multi-surface water repellent and sealer for concrete, wood, brick and stucco

**Supplier:** Rust-Oleum Corporation  
11 Hawthorn Parkway  
Vernon Hills, IL 60061  
USA

**Manufacturer:** Rust-Oleum Corporation  
11 Hawthorn Parkway  
Vernon Hills, IL 60061  
USA

**Preparer:** Regulatory Department

## 2. Hazard Identification

**EMERGENCY OVERVIEW:** Use ventilation necessary to keep exposures below recommended exposure limits, if any.

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes eye irritation.

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** Substance may cause slight skin irritation.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Low hazard for usual industrial handling or commercial handling by trained personnel.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Substance may be harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** No Information

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact

## 3. Composition/Information On Ingredients

| Chemical Name            | CAS-No. | Weight %<br>Less Than | ACGIH TLV-<br>TWA | ACGIH TLV-<br>STEL | OSHA PEL-TWA | OSHA PEL-<br>CEILING |
|--------------------------|---------|-----------------------|-------------------|--------------------|--------------|----------------------|
| No hazardous items exist |         |                       |                   |                    |              |                      |

## 4. First-aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation.

**FIRST AID - INGESTION:** Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

## 5. Fire-fighting Measures

**Flash Point, °F** 212 (Setaflash)

**EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent buildup of steam.

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Avoid contact with eyes.

**STORAGE:** Keep from freezing. Keep container closed when not in use.

## 8. Exposure Controls/Personal Protection

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking.

## 9. Physical and Chemical Properties

|                             |                  |                          |                   |
|-----------------------------|------------------|--------------------------|-------------------|
| <b>Vapor Density</b>        | Heavier than Air | <b>Odor:</b>             | Ammonia Like      |
| <b>Appearance:</b>          | Liquid           | <b>Evaporation Rate:</b> | Slower than Ether |
| <b>Solubility in Water:</b> | Miscible         | <b>Freeze Point:</b>     | N.D.              |
| <b>Specific Gravity:</b>    | 1.005            | <b>pH:</b>               | N.E.              |
| <b>Physical State:</b>      | Liquid           |                          |                   |

(See section 16 for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid contact with strong acid and strong bases.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

### Chemical Name

### LD50

### LC50

No toxicological information

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

## 14. Transport Information

|                              | <b>Domestic (USDOT)</b> | <b>International (IMDG)</b> | <b>Air (IATA)</b> |
|------------------------------|-------------------------|-----------------------------|-------------------|
| <b>Proper Shipping Name:</b> | Paint                   | Not Regulated               | Not Regulated     |
| <b>Hazard Class:</b>         | Not Regulated           | N.A.                        | N.A.              |
| <b>UN Number:</b>            | ----                    | N.A.                        | N.A.              |
| <b>Packing Group:</b>        | ---                     | N.A.                        | N.A.              |
| <b>Limited Quantity:</b>     | No                      | No                          | No                |

## 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

None Known

#### SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

#### TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

**International Regulations:****CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: D2B

**16. Other Information****HMIS Ratings:**

Health: 1      Flammability: 1      Physical Hazard: 0      Personal Protection: X

**NFPA Ratings:**

Health: 1      Flammability: 1      Instability: 0

**REASON FOR REVISION:** Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

## Section 1 - Product and Company Identification

|                     |  |
|---------------------|--|
| Material Name       | - Premium Fibered Asphalt Coatings                                       |
| Chemical Category   | - Mixture  |
| Product Code        | - AP-2025  |
| Product Description | - Black liquid   |
| Product Use         | - Asphalt Based Roof Coating / Repair                                    |
| Manufacturer        | - APOC<br>4161 E. 7th Avenue<br>Tampa, FL 33605<br>United States         |
| Telephone           |  |
| Technical           | - 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time |
| Emergency           | - 800-424-9300 - CHEMTREC  |
| Emergency           | - 703-527-3887 - CHEMTREC (Outside US)                                   |

## Section 2 - Hazards Identification

### GHS HAZARDS AND PRECAUTIONS

#### SIGNAL WORD: WARNING!

*Flammable liquid and vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.*

|                  |  |
|------------------|--|
| Prevention       | Avoid breathing dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Use personal protective equipment as required. Keep out of reach of children. |
| Response         | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.               |
| Storage/Disposal | Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.   |



|               |   |
|---------------|---|
| Physical Form | - Liquid  |
| Color         | - Black   |
| Odor          | - Petroleum solvent odor.   |
| Flash Point   | - 105 F(40 C)   |
| OSHA(HCS2012) | - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A |
| WHMIS         | - Class B - Flammable and Combustible Materials - Division 3, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A                   |



|  |   |
|--|---|
| <b>GHS</b>                                       | - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A                     |
| <b>Route Of Entry</b>                            | - Inhalation, Skin, Eye, Ingestion/Oral   |
| <b>Medical Conditions Aggravated by Exposure</b> | - Lungs/Respiratory System,   |
| <b>Potential Health Effects</b>                  |   |
| <b>Inhalation</b>                                |   |
| <b>Acute (Immediate)</b>                         | - May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.   |
| <b>Chronic (Delayed)</b>                         | - Refer to other information found in Section 11-Toxicology.  |
| <b>Skin</b>                                      |   |
| <b>Acute (Immediate)</b>                         | - May cause irritation.   |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure to the skin may cause dermatitis.   |
| <b>Eye</b>                                       |   |
| <b>Acute (Immediate)</b>                         | - May cause burning and redness or swelling of the eyes.  |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure may cause irritation.   |
| <b>Ingestion</b>                                 |   |
| <b>Acute (Immediate)</b>                         | - May be harmful or fatal if swallowed. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.   |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure may be harmful.   |
| <b>Carcinogenic Effects</b>                      | - This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details. |

| Carcinogenic Effects |           |                              |                     |
|----------------------|-----------|------------------------------|---------------------|
|                      | CAS       | IARC                         | NTP                 |
| Asphalt              | 8052-42-4 | Group 2B-Possible Carcinogen | Under Consideration |

See Section 12 for Ecological Information.

## Section 3 - Composition/Information on Ingredients

| Hazardous Components   |           |            |                   |  |   |  |
|------------------------|-----------|------------|-------------------|--|---|--|
| Chemical Name          | CAS       | %(wt)      | UN;EINE CS        | LD50/LC50  | Classifications According to Regulation/Directive   |  |
| Asphalt                | 8052-42-4 | 40% TO 60% | NA1999, 232-490-9 | Ingestion/Oral-Rat LD50 · >5000 mg/kg<br>Inhalation-Rat LC50 · >94.4 mg/m <sup>3</sup>       | <b>WHMIS:</b> Other Toxic Effects - D2A<br><b>UN GHS:</b> Carc. 2; Eye Irrit. 2A; Skin Irrit. 2<br><b>EU DSD/DPD:</b>   |  |
| Mineral Spirits        | 8052-41-3 | 15% TO 25% | 232-489-3         |  | <b>EU DSD/DPD:</b> Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65  |  |
| Calcium Carbonate      | 1317-65-3 | 10% TO 20% | 215-279-6         |  | NDA   |  |
| Cellulose              | 9004-34-6 | 2% TO 6%   | 232-674-9         | Ingestion/Oral-Rat LD50 · >5 g/kg<br>Inhalation-Rat LC50 · >5800 mg/m <sup>3</sup> 4 Hour(s) | <b>WHMIS:</b> Other Toxic Effects - D2B<br><b>UN GHS:</b> Eye Irrit. 2A; Skin Irrit. 2<br><b>EU DSD/DPD:</b>  |  |
| 1,2,4-Trimethylbenzene | 95-63-6   | < 1%       | 202-436-9         | Ingestion/Oral-Rat LD50 · 5 g/kg<br>Inhalation-Rat LC50 · 18000 mg/m <sup>3</sup> 4 Hour(s)  | <b>UN GHS:</b> Acute Tox. 4 (Inhalation); Aquatic Chronic 2; Flam. Liq. 3; Eye Irrit. 2A; Skin Irrit. 2; STOT RE 2; STOT SE 2<br><b>EU DSD/DPD:</b> R10Xn; R20Xi; R36/37/38N; R51 R53 |  |

| Hazardous Components     |           |           |                   |                                     |   |  |
|--------------------------|-----------|-----------|-------------------|-------------------------------------|---|--|
| Chemical Name            | CAS       | %(wt)     | UN;EINECS         | LD50/LC50                           | Classifications According to Regulation/Directive |  |
| Benzene, 1,3,5-trimethyl | 108-67-8  | < 1%      | UN2325, 203-604-4 |                                     | EU DSD/DPD: R10 Xi; R37 N; R51 R53                |  |
| Non-Hazardous Components |           |           |                   |                                     |   |  |
| Chemical Name            | CAS       | %(wt)     | UN;EINECS         | LD50/LC50                           | Classifications According to Regulation/Directive |  |
| Water                    | 7732-18-5 | 1% TO 10% | 231-791-2         | Ingestion/Oral-Rat LD50 · >90 mL/kg | NDA   |  |

**This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.**

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

- |                   |  |
|-------------------|--|
| <b>Inhalation</b> | - Move victim to fresh air. If breathing has stopped, apply artificial respiration. Get medical attention immediately.   |
| <b>Skin</b>       | - Remove contaminated clothing and shoes. Wash the contaminated area of body with soap and fresh water. Get medical attention if symptoms occur. Wash clothing before reuse.   |
| <b>Eye</b>        | - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately if symptoms occur. |
| <b>Ingestion</b>  | - Call a physician or poison control center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.  |

## Section 5 - Fire Fighting Measures

- |   |  |
|---|--|
| <b>Extinguishing Media</b>                | - LARGE FIRE: Water spray, fog or regular foam.<br>SMALL FIRES: Dry chemical, CO2, water spray or regular foam.  |
| <b>Unsuitable Extinguishing Media</b>     | - Do not use direct stream of water.   |
| <b>Firefighting Procedures</b>            | - Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point, it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and are ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. |
| <b>Unusual Fire and Explosion Hazards</b> | - Combustible liquid. May release irritating or toxic gases, fumes, or vapors.   |
| <b>Hazardous Combustion Products</b>      | - Carbon monoxide, carbon dioxide, hydrocarbons.   |
| <b>Protection of Firefighters</b>         | - Firefighters should wear self-contained breathing apparatus and full protective gear.  |
| <b>Flash Point</b>                        | - 105°F(40°C) CC (Closed Cup)  |
| <b>Explosion Limits</b>                   |  |
| <b>Upper</b>                              | - 6 %  |
| <b>Lower</b>                              | - 0.9 %  |
| <b>Autoignition Temperature</b>           | - 450°F(232°C)   |

## Section 6 - Accidental Release Measures

- Personal Precautions** - Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry.
- Emergency Procedures** - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Keep unauthorized personnel away.
- Environmental Precautions** - Prevent spillage into waterways.
- Containment/Clean-up Measures** - Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Use appropriate Personal Protective Equipment (PPE). Do not use water to flush spill area.
- Prohibited Materials** - Avoid contact with strong oxidizing agents and acids.

## Section 7 - Handling and Storage

- Handling** - **KEEP OUT OF THE REACH OF CHILDREN!** Keep away from heat and ignition sources – No Smoking. Use only with adequate ventilation.
- Storage** - Keep container/package tightly closed and in a well-ventilated place. Do not store and transport with oxidizers, acids, etc. Store away from sources of ignition. Keep away from fire.
- Special Packaging Materials** - No data available
- Incompatible Materials or Ignition Sources** - Avoid contact with strong oxidizing agents and acids.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

#### Pictograms



#### Respiratory

- If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator.

#### Eye/Face

- Wear ANSI approved safety glasses with side shields or safety goggles.

#### Hands

- Wear chemical protective gloves made of Nitrile or Neoprene.

#### Skin/Body

- Wear clothing that covers the skin to prevent skin exposure.

#### General Industrial Hygiene

- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

#### Considerations

#### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines

|                                  | Result | Canada Ontario  | NIOSH                     | OSHA            | United States - California |
|----------------------------------|--------|-----------------|---------------------------|-----------------|----------------------------|
| 1,2,4-Trimethylbenzene (95-63-6) | TWAs   | Not established | 25 ppm TWA; 125 mg/m3 TWA | Not established | Not established            |
| Benzene, 1,3,5-                  | TWAs   | Not established | 25 ppm TWA; 125 mg/m3 TWA | Not established | Not established            |

| Exposure Limits/Guidelines       |        |   |  |  |  |
|----------------------------------|--------|---|--|--|--|
|                                  | Result | Canada Ontario  | NIOSH  | OSHA   | United States - California                                   |
| trimethyl<br>(108-67-8)          |        |   |  |  |  |
| Cellulose<br>(9004-34-6)         | TWAs   | 10 mg/m3 TWAEV (paper fibre, total dust)                      | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | 10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction) |
| Calcium carbonate<br>(1317-65-3) | TWAs   | Not established   | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | Not established  |
| Mineral Spirits<br>(8052-41-3)   | TWAs   | 525 mg/m3 TWAEV   | 350 mg/m3 TWA  | 500 ppm TWA; 2900 mg/m3 TWA                                  | 100 ppm PEL; 525 mg/m3 PEL                                   |
| Asphalt<br>(8052-42-4)           | TWAs   | 0.5 mg/m3 TWAEV (fume, inhalable, as benzene-soluble aerosol) | Not established  | Not established  | 5 mg/m3 PEL (fume)   |

Exposure Control Notations

ACGIH

- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

## Section 9 - Physical and Chemical Properties

|   |                              |  |                                      |
|---|------------------------------|--|--------------------------------------|
| <b>Physical Form:</b>                     | Liquid                       | <b>Appearance/Description:</b>                     | Black paste.                         |
| <b>Color:</b>                             | Black                        | <b>Odor:</b>                                       | Petroleum solvent odor.              |
| <b>Odor Threshold:</b>                    | Not Available                | <b>Boiling Point:</b>                              | 300 to 400 F(148.8889 to 204.4444 C) |
| <b>Specific Gravity/Relative Density:</b> | = 1.154 Water=1              | <b>Density:</b>                                    | = 9.62 lbs/gal                       |
| <b>Solvent Solubility:</b>                | Yes                          | <b>Viscosity:</b>                                  | Not Available                        |
| <b>Vapor Pressure:</b>                    | = 2 mmHg (torr) @ 68 F(20 C) | <b>Vapor Density:</b>                              | = 1 Air=1                            |
| <b>VOC (Vol.):</b>                        | < 250 g/L                    | <b>Volatiles (Wt.):</b>                            | Not relevant                         |
| <b>Volatiles (Vol.):</b>                  | Not Available                | <b>Flash Point:</b>                                | 105 F(40.5556 C)                     |
| <b>Flash Point Test Type:</b>             | CC (Closed Cup)              | <b>UEL:</b>  | 6 %                                  |
| <b>LEL:</b>                               | .9 %                         | <b>Heat of Combustion (ΔHc):</b>                   | Not relevant                         |
| <b>Autoignition:</b>                      | 450 F(232.2222 C)            | <b>Self-Accelerating Decomposition Temperature</b> | Not relevant                         |

## Section 10 - Stability and Reactivity

|   |   |
|---|---|
| <b>Stability</b>                        | - Stable under normal temperatures and pressures.       |
| <b>Hazardous Polymerization</b>         | - Hazardous polymerization not indicated.               |
| <b>Conditions to Avoid</b>              | - Avoid contact with strong oxidizing agents and flame. |
| <b>Incompatible Materials</b>           | - Strong oxidizers and acids.                           |
| <b>Hazardous Decomposition Products</b> | - Carbon monoxide, carbon dioxide and hydrocarbons.     |

## Section 11 - Toxicological Information

| Component Name | Concentration | CAS       | Data  |
|----------------|---------------|-----------|---|
| Water          | 1% TO 10%     | 7732-18-5 | Acute Toxicity: ; orl-rat LD50:>90 mL/kg  |
| Asphalt        | 40% TO 60%    | 8052-42-4 | Acute Toxicity: ; ihl-hmn TDLo:10 mg/m3/5.5Y-I<br>Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I |
| Cellulose      | 2% TO 6%      | 9004-34-6 | Acute Toxicity: ; ihl-rat LC50:>5800 mg/m3/4H   |

| Component Name         | Concentration | CAS     | Data  |
|------------------------|---------------|---------|---|
| 1,2,4-Trimethylbenzene | < 1%          | 95-63-6 | Acute Toxicity: ; ihl-rat LC50:18000 mg/m3/4H |

#### Other Information

- This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

### Section 12 - Ecological Information

- |                           |                      |
|---------------------------|----------------------|
| Ecological Fate           | - No data available. |
| Persistence/Degradability | - No data available. |
| Bioaccumulation Potential | - No data available. |
| Mobility in Soil          | - No data available. |

### Section 13 - Disposal Considerations

- |         |   |
|---------|---|
| Product | - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
|---------|---|

### Section 14 - Transportation Information

**DOT – Department of Transportation** - Not Regulated when shipped in containers <119 gallons.

**TDG - Canada Transportation of Dangerous Goods:** Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

**TDG Transportation Other Information:** Not Restricted under General Exemption for small container packaging.

**IMO/IMDG –International Maritime Transport** - Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

**IATA - International Air Transport Association** - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

### Section 15 - Regulatory Information

- |                                    |  |
|------------------------------------|--|
| <b>SARA Hazard Classifications</b> | - Acute, Chronic   |
| <b>Risk &amp; Safety Phrases</b>   | - California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm. . |

| State Right To Know |           |     |     |     |     |
|---------------------|-----------|-----|-----|-----|-----|
| Component           | CAS       | MA  | MN  | NJ  | PA  |
| Water               | 7732-18-5 | No  | No  | No  | No  |
| Asphalt             | 8052-42-4 | Yes | Yes | Yes | Yes |
| Mineral Spirits     | 8052-41-3 | Yes | Yes | Yes | Yes |
| Calcium carbonate   | 1317-65-3 | Yes | Yes | Yes | Yes |
| Cellulose           | 9004-34-6 | Yes | Yes | Yes | Yes |

| State Right To Know      |          |     |     |     |     |
|--------------------------|----------|-----|-----|-----|-----|
| Component                | CAS      | MA  | MN  | NJ  | PA  |
| 1,2,4-Trimethylbenzene   | 95-63-6  | Yes | Yes | Yes | Yes |
| Benzene, 1,3,5-trimethyl | 108-67-8 | Yes | No  | No  | No  |

| Inventory                |           |           |      |
|--------------------------|-----------|-----------|------|
| Component                | CAS       | EU EINECS | TSCA |
| Water                    | 7732-18-5 | Yes       | Yes  |
| Asphalt                  | 8052-42-4 | Yes       | Yes  |
| Mineral Spirits          | 8052-41-3 | Yes       | Yes  |
| Calcium carbonate        | 1317-65-3 | Yes       | Yes  |
| Cellulose                | 9004-34-6 | Yes       | Yes  |
| 1,2,4-Trimethylbenzene   | 95-63-6   | Yes       | Yes  |
| Benzene, 1,3,5-trimethyl | 108-67-8  | Yes       | Yes  |

#### Canada - WHMIS - Classifications of Substances

|                            |           |            |   |
|----------------------------|-----------|------------|---|
| - Cellulose                | 9004-34-6 | 2% TO 6%   | Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers) |
| - Asphalt                  | 8052-42-4 | 40% TO 60% | Not Listed  |
| - 1,2,4-Trimethylbenzene   | 95-63-6   | < 1%       | B3  |
| - Water                    | 7732-18-5 | 1% TO 10%  | Uncontrolled product according to WHMIS classification criteria   |
| - mineral spirits          | 8052-41-3 | 15% TO 25% | B3, D2B   |
| - Benzene, 1,3,5-trimethyl | 108-67-8  | < 1%       | B3  |
| - Calcium carbonate        | 1317-65-3 | 10% TO 20% | D2A   |

#### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

|                          |         |      |                                |
|--------------------------|---------|------|--------------------------------|
| - 1,2,4-Trimethylbenzene | 95-63-6 | < 1% | 1.0 % de minimis concentration |
|--------------------------|---------|------|--------------------------------|

## Section 16 - Other Information

#### Last Revision Date

- 5/26/2015

#### Prepared By

- GG Inc.

#### Disclaimer/Statement of Liability

- This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. APOC does not accept liability for any loss or damage that may occur from the use of this information.

NFPA



## Section 1 - Product and Company Identification

|                     |  |
|---------------------|--|
| Material Name       | - Premium Fibered Asphalt Coatings                                       |
| Chemical Category   | - Mixture  |
| Product Code        | - AP-2027  |
| Product Description | - Black liquid   |
| Product Use         | - Asphalt Based Roof Coating / Repair                                    |
| Manufacturer        | - APOC<br>4161 E. 7th Avenue<br>Tampa, FL 33605<br>United States         |
| Telephone           |  |
| Technical           | - 813-248-2101 - Customer Service: 8 AM - 5 PM M-F Eastern Standard Time |
| Emergency           | - 800-424-9300 - CHEMTREC  |
| Emergency           | - 703-527-3887 - CHEMTREC (Outside US)                                   |

## Section 2 - Hazards Identification

### GHS HAZARDS AND PRECAUTIONS

#### SIGNAL WORD: WARNING!

*Flammable liquid and vapor. Contains Combustible Petroleum Distillates. Harmful or Fatal if swallowed. Keep away from heat, sparks, and open flame. Avoid prolonged breathing of vapor and use only in adequate ventilation. Repeated and prolonged overexposure to solvent vapor may cause brain and nervous system damage, respiratory tract irritation, dizziness, or loss of consciousness. May cause skin and eye irritation.*

|                  |  |
|------------------|--|
| Prevention       | Avoid breathing dust, fume, gas, mist, vapours and/or spray. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. - No smoking. Use personal protective equipment as required. Keep out of reach of children. |
| Response         | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of soap and water. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.               |
| Storage/Disposal | Store in a closed container. Store in a well-ventilated place. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.   |



|               |   |
|---------------|---|
| Physical Form | - Liquid  |
| Color         | - Black   |
| Odor          | - Petroleum solvent odor.   |
| Flash Point   | - 105 F(40 C)   |
| OSHA(HCS2012) | - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A |
| WHMIS         | - Class B - Flammable and Combustible Materials - Division 3, Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A                   |



|  |   |
|--|---|
| <b>GHS</b>                                       | - Flammable Liquids - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A, Carcinogenicity - Category 1A                     |
| <b>Route Of Entry</b>                            | - Inhalation, Skin, Eye, Ingestion/Oral   |
| <b>Medical Conditions Aggravated by Exposure</b> | - Lungs/Respiratory System,   |
| <b>Potential Health Effects</b>                  |   |
| <b>Inhalation</b>                                |   |
| <b>Acute (Immediate)</b>                         | - May cause irritation. Excessive breathing of high vapor concentration can cause possible unconsciousness and even asphyxiation.   |
| <b>Chronic (Delayed)</b>                         | - Refer to other information found in Section 11-Toxicology.  |
| <b>Skin</b>                                      |   |
| <b>Acute (Immediate)</b>                         | - May cause irritation.   |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure to the skin may cause dermatitis.   |
| <b>Eye</b>                                       |   |
| <b>Acute (Immediate)</b>                         | - May cause burning and redness or swelling of the eyes.  |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure may cause irritation.   |
| <b>Ingestion</b>                                 |   |
| <b>Acute (Immediate)</b>                         | - May be harmful or fatal if swallowed. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.   |
| <b>Chronic (Delayed)</b>                         | - Repeated and prolonged exposure may be harmful.   |
| <b>Carcinogenic Effects</b>                      | - This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 - Toxicological Information for more details. |

| Carcinogenic Effects |           |                              |                     |
|----------------------|-----------|------------------------------|---------------------|
|                      | CAS       | IARC                         | NTP                 |
| Asphalt              | 8052-42-4 | Group 2B-Possible Carcinogen | Under Consideration |

See Section 12 for Ecological Information.

## Section 3 - Composition/Information on Ingredients

| Hazardous Components   |           |            |                   |  |   |  |
|------------------------|-----------|------------|-------------------|--|---|--|
| Chemical Name          | CAS       | %(wt)      | UN;EINE CS        | LD50/LC50  | Classifications According to Regulation/Directive   |  |
| Asphalt                | 8052-42-4 | 40% TO 60% | NA1999, 232-490-9 | Ingestion/Oral-Rat LD50 · >5000 mg/kg<br>Inhalation-Rat LC50 · >94.4 mg/m <sup>3</sup>       | <b>WHMIS:</b> Other Toxic Effects - D2A<br><b>UN GHS:</b> Carc. 2; Eye Irrit. 2A; Skin Irrit. 2<br><b>EU DSD/DPD:</b>   |  |
| Mineral Spirits        | 8052-41-3 | 15% TO 25% | 232-489-3         |  | <b>EU DSD/DPD:</b> Carc.Cat.2; R45 Muta.Cat.2; R46 Xn; R65  |  |
| Calcium Carbonate      | 1317-65-3 | 10% TO 20% | 215-279-6         |  | NDA   |  |
| Cellulose              | 9004-34-6 | 2% TO 6%   | 232-674-9         | Ingestion/Oral-Rat LD50 · >5 g/kg<br>Inhalation-Rat LC50 · >5800 mg/m <sup>3</sup> 4 Hour(s) | <b>WHMIS:</b> Other Toxic Effects - D2B<br><b>UN GHS:</b> Eye Irrit. 2A; Skin Irrit. 2<br><b>EU DSD/DPD:</b>  |  |
| 1,2,4-Trimethylbenzene | 95-63-6   | < 1%       | 202-436-9         | Ingestion/Oral-Rat LD50 · 5 g/kg<br>Inhalation-Rat LC50 · 18000 mg/m <sup>3</sup> 4 Hour(s)  | <b>UN GHS:</b> Acute Tox. 4 (Inhalation); Aquatic Chronic 2; Flam. Liq. 3; Eye Irrit. 2A; Skin Irrit. 2; STOT RE 2; STOT SE 2<br><b>EU DSD/DPD:</b> R10Xn; R20Xi; R36/37/38N; R51 R53 |  |

| Hazardous Components     |           |           |                   |                                     |   |  |
|--------------------------|-----------|-----------|-------------------|-------------------------------------|---|--|
| Chemical Name            | CAS       | %(wt)     | UN;EINECS         | LD50/LC50                           | Classifications According to Regulation/Directive |  |
| Benzene, 1,3,5-trimethyl | 108-67-8  | < 1%      | UN2325, 203-604-4 |                                     | EU DSD/DPD: R10 Xi; R37 N; R51 R53                |  |
| Non-Hazardous Components |           |           |                   |                                     |   |  |
| Chemical Name            | CAS       | %(wt)     | UN;EINECS         | LD50/LC50                           | Classifications According to Regulation/Directive |  |
| Water                    | 7732-18-5 | 1% TO 10% | 231-791-2         | Ingestion/Oral-Rat LD50 · >90 mL/kg | NDA   |  |

**This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding.**

See Section 11 for Toxicological Information.

## Section 4 - First Aid Measures

- |                   |  |
|-------------------|--|
| <b>Inhalation</b> | - Move victim to fresh air. If breathing has stopped, apply artificial respiration. Get medical attention immediately.   |
| <b>Skin</b>       | - Remove contaminated clothing and shoes. Wash the contaminated area of body with soap and fresh water. Get medical attention if symptoms occur. Wash clothing before reuse.   |
| <b>Eye</b>        | - Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately if symptoms occur. |
| <b>Ingestion</b>  | - Call a physician or poison control center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.  |

## Section 5 - Fire Fighting Measures

- |   |  |
|---|--|
| <b>Extinguishing Media</b>                | - LARGE FIRE: Water spray, fog or regular foam.<br>SMALL FIRES: Dry chemical, CO2, water spray or regular foam.  |
| <b>Unsuitable Extinguishing Media</b>     | - Do not use direct stream of water.   |
| <b>Firefighting Procedures</b>            | - Fight advanced or massive fires from safe distance or protected location. Avoid water in a straight hose stream as the stream will cause splatter and spread fire. If product is heated above its flash point, it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and are ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. |
| <b>Unusual Fire and Explosion Hazards</b> | - Combustible liquid. May release irritating or toxic gases, fumes, or vapors.   |
| <b>Hazardous Combustion Products</b>      | - Carbon monoxide, carbon dioxide, hydrocarbons.   |
| <b>Protection of Firefighters</b>         | - Firefighters should wear self-contained breathing apparatus and full protective gear.  |
| <b>Flash Point</b>                        | - 105°F(40°C) CC (Closed Cup)  |
| <b>Explosion Limits</b>                   |  |
| <b>Upper</b>                              | - 6 %  |
| <b>Lower</b>                              | - 0.9 %  |
| <b>Autoignition Temperature</b>           | - 450°F(232°C)   |

## Section 6 - Accidental Release Measures

- Personal Precautions** - Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Stay upwind. Ventilate the area before entry.
- Emergency Procedures** - ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Keep unauthorized personnel away.
- Environmental Precautions** - Prevent spillage into waterways.
- Containment/Clean-up Measures** - Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Use appropriate Personal Protective Equipment (PPE). Do not use water to flush spill area.
- Prohibited Materials** - Avoid contact with strong oxidizing agents and acids.

## Section 7 - Handling and Storage

- Handling** - **KEEP OUT OF THE REACH OF CHILDREN!** Keep away from heat and ignition sources – No Smoking. Use only with adequate ventilation.
- Storage** - Keep container/package tightly closed and in a well-ventilated place. Do not store and transport with oxidizers, acids, etc. Store away from sources of ignition. Keep away from fire.
- Special Packaging Materials** - No data available
- Incompatible Materials or Ignition Sources** - Avoid contact with strong oxidizing agents and acids.

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

#### Pictograms



#### Respiratory

- If listed exposure limits are expected to be exceeded, use approved respiratory protection suitable for the hazard. When used with adequate ventilation, a respirator is not normally required. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge or supplied air respirator.

#### Eye/Face

- Wear ANSI approved safety glasses with side shields or safety goggles.

#### Hands

- Wear chemical protective gloves made of Nitrile or Neoprene.

#### Skin/Body

- Wear clothing that covers the skin to prevent skin exposure.

#### General Industrial Hygiene

- Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

#### Considerations

#### Engineering Measures/Controls

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Use precaution to protect building intake from fumes and vapors created outdoors.

Exposure Limits/Guidelines

|                                  | Result | Canada Ontario  | NIOSH                     | OSHA            | United States - California |
|----------------------------------|--------|-----------------|---------------------------|-----------------|----------------------------|
| 1,2,4-Trimethylbenzene (95-63-6) | TWAs   | Not established | 25 ppm TWA; 125 mg/m3 TWA | Not established | Not established            |
| Benzene, 1,3,5-                  | TWAs   | Not established | 25 ppm TWA; 125 mg/m3 TWA | Not established | Not established            |

| Exposure Limits/Guidelines       |        |   |  |  |  |
|----------------------------------|--------|---|--|--|--|
|                                  | Result | Canada Ontario  | NIOSH  | OSHA   | United States - California                                   |
| trimethyl<br>(108-67-8)          |        |   |  |  |  |
| Cellulose<br>(9004-34-6)         | TWAs   | 10 mg/m3 TWAEV (paper fibre, total dust)                      | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | 10 mg/m3 PEL (total dust); 5 mg/m3 PEL (respirable fraction) |
| Calcium carbonate<br>(1317-65-3) | TWAs   | Not established   | 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust) | 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction) | Not established  |
| Mineral Spirits<br>(8052-41-3)   | TWAs   | 525 mg/m3 TWAEV   | 350 mg/m3 TWA  | 500 ppm TWA; 2900 mg/m3 TWA                                  | 100 ppm PEL; 525 mg/m3 PEL                                   |
| Asphalt<br>(8052-42-4)           | TWAs   | 0.5 mg/m3 TWAEV (fume, inhalable, as benzene-soluble aerosol) | Not established  | Not established  | 5 mg/m3 PEL (fume)   |

Exposure Control Notations

ACGIH

- Asphalt (8052-42-4):Carcinogens:A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free)

## Section 9 - Physical and Chemical Properties

|   |                              |  |                                      |
|---|------------------------------|--|--------------------------------------|
| <b>Physical Form:</b>                     | Liquid                       | <b>Appearance/Description:</b>                     | Black paste.                         |
| <b>Color:</b>                             | Black                        | <b>Odor:</b>                                       | Petroleum solvent odor.              |
| <b>Odor Threshold:</b>                    | Not Available                | <b>Boiling Point:</b>                              | 300 to 400 F(148.8889 to 204.4444 C) |
| <b>Specific Gravity/Relative Density:</b> | = 1.154 Water=1              | <b>Density:</b>                                    | = 9.62 lbs/gal                       |
| <b>Solvent Solubility:</b>                | Yes                          | <b>Viscosity:</b>                                  | Not Available                        |
| <b>Vapor Pressure:</b>                    | = 2 mmHg (torr) @ 68 F(20 C) | <b>Vapor Density:</b>                              | = 1 Air=1                            |
| <b>VOC (Vol.):</b>                        | < 250 g/L                    | <b>Volatiles (Wt.):</b>                            | Not relevant                         |
| <b>Volatiles (Vol.):</b>                  | Not Available                | <b>Flash Point:</b>                                | 105 F(40.5556 C)                     |
| <b>Flash Point Test Type:</b>             | CC (Closed Cup)              | <b>UEL:</b>  | 6 %                                  |
| <b>LEL:</b>                               | .9 %                         | <b>Heat of Combustion (ΔHc):</b>                   | Not relevant                         |
| <b>Autoignition:</b>                      | 450 F(232.2222 C)            | <b>Self-Accelerating Decomposition Temperature</b> | Not relevant                         |

## Section 10 - Stability and Reactivity

|   |   |
|---|---|
| <b>Stability</b>                        | - Stable under normal temperatures and pressures.       |
| <b>Hazardous Polymerization</b>         | - Hazardous polymerization not indicated.               |
| <b>Conditions to Avoid</b>              | - Avoid contact with strong oxidizing agents and flame. |
| <b>Incompatible Materials</b>           | - Strong oxidizers and acids.                           |
| <b>Hazardous Decomposition Products</b> | - Carbon monoxide, carbon dioxide and hydrocarbons.     |

## Section 11 - Toxicological Information

| Component Name | Concentration | CAS       | Data  |
|----------------|---------------|-----------|---|
| Water          | 1% TO 10%     | 7732-18-5 | Acute Toxicity: ; orl-rat LD50:>90 mL/kg  |
| Asphalt        | 40% TO 60%    | 8052-42-4 | Acute Toxicity: ; ihl-hmn TDLo:10 mg/m3/5.5Y-I<br>Tumorigen/Carcinogen: ; skn-mus TDLo:905 gm/kg/2Y-I |
| Cellulose      | 2% TO 6%      | 9004-34-6 | Acute Toxicity: ; ihl-rat LC50:>5800 mg/m3/4H   |

| Component Name         | Concentration | CAS     | Data  |
|------------------------|---------------|---------|---|
| 1,2,4-Trimethylbenzene | < 1%          | 95-63-6 | Acute Toxicity: ; ihl-rat LC50:18000 mg/m3/4H |

#### Other Information

- This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The National Institute of Occupational Safety and Health (NIOSH), has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes. This product may contain small amounts of polycyclic aromatic hydrocarbons (PAH's) which are recognized carcinogens in humans and experimental animals. Mouse skin painting studies of roofing asphalt vapor concentrate have shown evidence of tumor formation associated with localized skin irritation in recent studies. Inhalation studies of high airborne concentrations of asphalt/bitumen fumes in rats and mice produced bronchitis, pneumonitis, and lung changes such as fibrosis and cell damage.

### Section 12 - Ecological Information

- |                           |                      |
|---------------------------|----------------------|
| Ecological Fate           | - No data available. |
| Persistence/Degradability | - No data available. |
| Bioaccumulation Potential | - No data available. |
| Mobility in Soil          | - No data available. |

### Section 13 - Disposal Considerations

- |         |   |
|---------|---|
| Product | - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
|---------|---|

### Section 14 - Transportation Information

**DOT – Department of Transportation** - Not Regulated when shipped in containers <119 gallons.

**TDG - Canada Transportation of Dangerous Goods:** Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

**TDG Transportation Other Information:** Not Restricted under General Exemption for small container packaging.

**IMO/IMDG –International Maritime Transport** - Tars, Liquids; UN1999; Hazard Class: 3; Packing Group: III

IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages.

**IATA - International Air Transport Association** - TARS, LIQUID; UN1999; Hazard Class: 3; Packing Group: III.

### Section 15 - Regulatory Information

- |                                    |  |
|------------------------------------|--|
| <b>SARA Hazard Classifications</b> | - Acute, Chronic   |
| <b>Risk &amp; Safety Phrases</b>   | - California PROP 65: Asphalt and Asphalt Fumes may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm. . |

| State Right To Know |           |     |     |     |     |
|---------------------|-----------|-----|-----|-----|-----|
| Component           | CAS       | MA  | MN  | NJ  | PA  |
| Water               | 7732-18-5 | No  | No  | No  | No  |
| Asphalt             | 8052-42-4 | Yes | Yes | Yes | Yes |
| Mineral Spirits     | 8052-41-3 | Yes | Yes | Yes | Yes |
| Calcium carbonate   | 1317-65-3 | Yes | Yes | Yes | Yes |
| Cellulose           | 9004-34-6 | Yes | Yes | Yes | Yes |

| State Right To Know      |          |     |     |     |     |
|--------------------------|----------|-----|-----|-----|-----|
| Component                | CAS      | MA  | MN  | NJ  | PA  |
| 1,2,4-Trimethylbenzene   | 95-63-6  | Yes | Yes | Yes | Yes |
| Benzene, 1,3,5-trimethyl | 108-67-8 | Yes | No  | No  | No  |

| Inventory                |           |           |      |
|--------------------------|-----------|-----------|------|
| Component                | CAS       | EU EINECS | TSCA |
| Water                    | 7732-18-5 | Yes       | Yes  |
| Asphalt                  | 8052-42-4 | Yes       | Yes  |
| Mineral Spirits          | 8052-41-3 | Yes       | Yes  |
| Calcium carbonate        | 1317-65-3 | Yes       | Yes  |
| Cellulose                | 9004-34-6 | Yes       | Yes  |
| 1,2,4-Trimethylbenzene   | 95-63-6   | Yes       | Yes  |
| Benzene, 1,3,5-trimethyl | 108-67-8  | Yes       | Yes  |

#### Canada - WHMIS - Classifications of Substances

|                            |           |            |   |
|----------------------------|-----------|------------|---|
| - Cellulose                | 9004-34-6 | 2% TO 6%   | Uncontrolled product according to WHMIS classification criteria (including microcrystalline and paper fibers) |
| - Asphalt                  | 8052-42-4 | 40% TO 60% | Not Listed  |
| - 1,2,4-Trimethylbenzene   | 95-63-6   | < 1%       | B3  |
| - Water                    | 7732-18-5 | 1% TO 10%  | Uncontrolled product according to WHMIS classification criteria   |
| - mineral spirits          | 8052-41-3 | 15% TO 25% | B3, D2B   |
| - Benzene, 1,3,5-trimethyl | 108-67-8  | < 1%       | B3  |
| - Calcium carbonate        | 1317-65-3 | 10% TO 20% | D2A   |

#### U.S. - CERCLA/SARA - Section 313 - Emission Reporting

|                          |         |      |                                |
|--------------------------|---------|------|--------------------------------|
| - 1,2,4-Trimethylbenzene | 95-63-6 | < 1% | 1.0 % de minimis concentration |
|--------------------------|---------|------|--------------------------------|

## Section 16 - Other Information

#### Last Revision Date

- 5/26/2015

#### Prepared By

- GG Inc.

#### Disclaimer/Statement of Liability

- This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to verify the suitability and completeness of such information for particular use. APOC does not accept liability for any loss or damage that may occur from the use of this information.

NFPA





# SAFETY DATA SHEET

Issue Date 22-Nov-2015

Revision Date 22-Nov-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** #15 ROOFER'S CHOICE PLASTIC ROOF CEMENT

### Other means of identification

**Product Code** RC015

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coatings Sealant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

HENRY COMPANY

999 N. Sepulveda Blvd., Suite 800

El Segundo, CA 90245-2716

Web Site: [www.henry.com](http://www.henry.com) [www.ca.henry.com](http://www.ca.henry.com)

### Emergency telephone number

**Company Phone Number** 800-486-1278

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |             |
|--|-------------|
| Skin corrosion/irritation                        | Category 2  |
| Serious eye damage/eye irritation                | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3  |
| Flammable liquids                                | Category 3  |

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Flammable liquid and vapor



**Appearance** viscous

**Physical state** liquid

**Odor** Solvent

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up  
Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**Unknown acute toxicity**

24.67952% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

Not applicable

**Mixture**

| Chemical Name | CAS No    | Weight-% |
|---------------|-----------|----------|
| Asphalt *     | 8052-42-4 | 15 - 40  |

|  |            |         |
|--|------------|---------|
| Water *  | 7732-18-5  | 15 - 40 |
| Solvent naphtha, petroleum, medium aliphatic * | 64742-88-7 | 7 - 13  |
| Cellulose *                                    | 9004-34-6  | 1 - 5   |
| Bentonite *                                    | 1302-78-9  | 1 - 5   |
| Fullers earth *                                | 8031-18-3  | 1 - 5   |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).  |
| <b>Eye contact</b>                        | Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.      |
| <b>Skin contact</b>                       | Wash off immediately with plenty of water.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician. |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.  |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition.  |

##### Most important symptoms and effects, both acute and delayed

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness. |
|-----------------|---|

##### Indication of any immediate medical attention and special treatment needed

|                           |                        |
|---------------------------|------------------------|
| <b>Note to physicians</b> | Treat symptomatically. |
|---------------------------|------------------------|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, sand, earth, water spray or regular foam.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Flammable.

##### Explosion data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

| Chemical Name  | ACGIH TLV   | OSHA PEL   | NIOSH IDLH   |
|--|---|--|--|
| Asphalt<br>8052-42-4                                       | TWA: 0.5 mg/m <sup>3</sup> benzene soluble aerosol fume, inhalable fraction | -  | Ceiling: 5 mg/m <sup>3</sup> fume 15 min   |
| Solvent naphtha, petroleum, medium aliphatic<br>64742-88-7 | -   | TWA: 500 ppm<br>TWA: 2900 mg/m <sup>3</sup>  | -  |
| Cellulose<br>9004-34-6                                     | TWA: 10 mg/m <sup>3</sup>   | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust<br>TWA: 1 mg/m <sup>3</sup> |
| Bentonite<br>1302-78-9                                     | TWA: 1 mg/m <sup>3</sup> respirable fraction                                | -  | -  |

NIOSH IDLH Immediately Dangerous to Life or Health

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

|                                |                          |                                  |                          |
|--------------------------------|--------------------------|----------------------------------|--------------------------|
| <b>Physical state</b>          | liquid                   | <b>Odor</b>                      | Solvent                  |
| <b>Appearance</b>              | viscous                  | <b>Odor threshold</b>            | No information available |
| <b>Color</b>                   | black                    |                                  |                          |
| <b><u>Property</u></b>         | <b><u>Values</u></b>     | <b><u>Remarks • Method</u></b>   |                          |
| pH                             | No information available |                                  |                          |
| Melting point / freezing point | No information available |                                  |                          |
| Boiling point / boiling range  | > 150 °C / 302 °F        |                                  |                          |
| Flash point                    | 42 °C / 108 °F           | Pensky-Martens Closed Cup (PMCC) |                          |
| Evaporation rate               | No information available |                                  |                          |
| Flammability (solid, gas)      | No information available |                                  |                          |
| Flammability Limit in Air      |                          |                                  |                          |
| Upper flammability limit:      | 6                        |                                  |                          |
| Lower flammability limit:      | 1                        |                                  |                          |
| Vapor pressure                 | No information available |                                  |                          |
| Vapor density                  | 3.6                      |                                  |                          |
| Relative density               | 1 - 1.1                  |                                  |                          |
| Water solubility               | Insoluble in water       |                                  |                          |
| Solubility in other solvents   | No information available |                                  |                          |
| Partition coefficient          | No information available |                                  |                          |
| Autoignition temperature       | >250 °C / 482 °F         |                                  |                          |
| Decomposition temperature      | No information available |                                  |                          |
| Kinematic viscosity            | > 100 mm <sup>2</sup> /s | @ 40 °C                          |                          |
| Dynamic viscosity              | No information available |                                  |                          |
| Explosive properties           | Not an explosive         |                                  |                          |
| Oxidizing properties           | Not applicable           |                                  |                          |

**Other Information**

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Density          | No information available |
| Bulk density     | No information available |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | May cause irritation of respiratory tract. May cause drowsiness or dizziness. |
| <b>Eye contact</b>  | Irritating to eyes.   |
| <b>Skin contact</b> | Irritating to skin.   |
| <b>Ingestion</b>    | No data available.  |

| Chemical Name   | Oral LD50            | Dermal LD50             | Inhalation LC50                      |
|---|----------------------|-------------------------|--------------------------------------|
| Asphalt<br>8052-42-4  | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | -                                    |
| Water<br>7732-18-5  | > 90 mL/kg ( Rat )   | -                       | -                                    |
| Solvent naphtha, petroleum,<br>medium aliphatic<br>64742-88-7 | > 5000 mg/kg ( Rat ) | = 3000 mg/kg ( Rabbit ) | > 5.28 mg/L ( Rat ) 4 h              |
| Cellulose<br>9004-34-6  | > 5 g/kg ( Rat )     | > 2 g/kg ( Rabbit )     | > 5800 mg/m <sup>3</sup> ( Rat ) 4 h |
| Bentonite<br>1302-78-9  | > 5000 mg/kg ( Rat ) | -                       | -                                    |

**Information on toxicological effects**

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Vapors may cause drowsiness and dizziness. |
|-----------------|---|

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|                               |  |
|-------------------------------|--|
| <b>Sensitization</b>          | No information available.  |
| <b>Germ cell mutagenicity</b> | No information available.  |
| <b>Carcinogenicity</b>        | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Chemical Name          | ACGIH | IARC     | NTP   | OSHA |
|------------------------|-------|----------|-------|------|
| Asphalt<br>8052-42-4   | -     | Group 2B | -     | X    |
| Cellulose<br>9004-34-6 | -     | Group 1  | Known | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

|                                 |  |
|---------------------------------|--|
| <b>Reproductive toxicity</b>    | No information available.  |
| <b>STOT - single exposure</b>   | Target Organs. Respiratory system. Eyes. Skin. Central nervous system. |
| <b>STOT - repeated exposure</b> | No information available.  |
| <b>Chronic toxicity</b>         | May cause adverse effects on the bone marrow and blood-forming system. |
| <b>Target Organ Effects</b>     | Eyes, Respiratory system, Skin, blood, Central nervous system, kidney. |
| <b>Aspiration hazard</b>        | No information available.  |

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5,252.00 mg/kg  
ATEmix (dermal) 2,573.00 mg/kg  
ATEmix (inhalation-dust/mist) 67.40 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects

65.68642 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation

| Chemical Name        | Partition coefficient |
|----------------------|-----------------------|
| Asphalt<br>8052-42-4 | 6                     |

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

## 14. TRANSPORT INFORMATION

**DOT** Not regulated (If shipped in NON BULK packaging by ground transport)

**TDG** Not regulated (If shipped in NON BULK packaging by ground transport)

### IATA

UN/ID no UN1999  
Proper shipping name Tars, liquid  
Hazard Class 3  
Packing Group III  
ERG Code 3L  
Special Provisions A3  
Description UN1999, Tars, liquid, 3, III

### IMDG

Non-regulated per 2.3.2.5  
UN/ID no UN1999  
Proper shipping name Tars, liquid  
Hazard Class 3  
Packing Group III  
EmS-No F-E, S-E

|                    |   |
|--------------------|---|
| Special Provisions | 955                                       |
| Description        | UN1999, Tars, liquid, 3, III, (42°C c.c.) |

**15. REGULATORY INFORMATION****International Inventories**

|               |          |
|---------------|----------|
| TSCA          | Complies |
| DSL/NDSL      | Complies |
| EINECS/ELINCS | Complies |
| IECSC         | Complies |
| KECL          | Complies |
| PICCS         | Complies |
| AICS          | Complies |

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical Name            | California Proposition 65 |
|--------------------------|---------------------------|
| Cellulose - 9004-34-6    | Carcinogen                |
| Quartz - 14808-60-7      | Carcinogen                |
| Methyl alcohol - 67-56-1 | Developmental             |

**U.S. State Right-to-Know Regulations**

| Chemical Name        | New Jersey | Massachusetts | Pennsylvania |
|----------------------|------------|---------------|--------------|
| Asphalt<br>8052-42-4 | X          | X             | X            |

|   |   |   |   |
|---|---|---|---|
| Solvent naphtha, petroleum,<br>medium aliphatic<br>64742-88-7 | X | - | - |
| Cellulose<br>9004-34-6  | X | X | X |
| Methyl alcohol<br>67-56-1                                     | X | X | X |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|                    |                  |                |                    |                                       |
|--------------------|------------------|----------------|--------------------|---------------------------------------|
| <b><u>NFPA</u></b> | Health hazards 2 | Flammability 2 | Instability 0      | Physical and Chemical<br>Properties - |
| <b><u>HMIS</u></b> | Health hazards 2 | Flammability 2 | Physical hazards 0 | Personal protection X                 |

Issue Date 22-Nov-2015

Revision Date 22-Nov-2015

**Revision Note**

No information available

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

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### SECTION 1: IDENTIFICATION

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#### GHS PRODUCT IDENTIFIERS:

**PRODUCT NAME:** MAS Table Top Pro Epoxy Hardener  
**SYNONYMS, TRADE NAMES:** MAS Table Top Pro Hardener, Part B  
**OTHER MEANS OF IDENTIFICATION:** Not Applicable

#### RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:

**USES:** Decoupage Coating  
**RESTRICTIONS ON USE:** None Identified

#### SUPPLIER'S DETAILS:

**MANUFACTURER/SUPPLIER:** Endurance Technologies, Inc.  
275 Bridge Point Drive  
South Saint Paul, MN 55075, USA  
**TELEPHONE:** +1 651 451 8000  
**FACSIMILE:** +1 651 451 9728  
**CONTACT PERSON:** Eric Frank

#### EMERGENCY PHONE NUMBER:

**INFOTRAC (24 HRS): USA & CANADA** 1 800 535 5053  
**INFOTRAC (24 HRS): INTERNATIONAL** +1 352 323 3500

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### SECTION 2: HAZARDS IDENTIFICATION

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#### GHS CLASSIFICATION OF SUBSTANCE OR MIXTURE:

Acute toxicity, oral: Category 4, H302  
Skin Corrosion: Category 1B, H314  
Eye Damage: Category 1, H318  
Toxic to reproduction: Category 2, H361  
Hazardous to the aquatic environment: Chronic Category 1, H410  
Hazardous to the aquatic environment: Acute Category 1, H400  
Acute toxicity, dermal: Category 4, H312  
Skin sensitization: Category 1, H317  
Aspiration Hazard: Category 1, H304

#### GHS LABEL ELEMENTS:

##### HAZARD SYMBOLS:



##### SIGNAL WORDS:

Danger

##### HAZARD STATEMENTS:

H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.

# SAFETY DATA SHEET

## TABLE TOP PRO HARDENER

H318 Causes serious eye damage.  
H361 Suspected of damaging fertility or the unborn child.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS:**

**PREVENTION:** P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe mists.  
P261 Avoid breathing dust, fumes, gas mist, vapors and spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, clothing, and eye/face protection.

**RESPONSE:** P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P312 Call a POISON CENTER if you feel unwell.  
P303+P361+P364+P353+P352 IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash before reuse. Rinse skin with water/shower. Wash with plenty of soap and water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 IF exposed or concerned: Get medical attention.  
P391 Collect spillage.

**STORAGE:** P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

**DISPOSAL:** P501 Dispose of contents and containers in accordance with local, regional and international regulations.

Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS) – Annex III

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| CHEMICAL NAME              | CAS NUMBER | CONTENT |
|----------------------------|------------|---------|
| Nonylphenol                | 84852-15-3 | 40-60%  |
| Polyoxypropylenetriamine   | 39423-51-3 | 40-60%  |
| N-(2-aminoethyl)piperazine | 140-31-8   | 1-10%   |

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

### SECTION 4: FIRST-AID MEASURES

**DESCRIPTION OF NECESSARY FIRST-AID MEASURES:**

**INHALATION:** If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

# SAFETY DATA SHEET

## TABLE TOP PRO HARDENER

- SKIN:** Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. Get medical attention immediately.
- EYES:** Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. Get medical attention immediately.
- INGESTION:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

### **MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:**

- SYMPTOMS:** Burns. Irritation. Pre-existing skin problems may be aggravated by prolonged or repeated contact. Persons with sensitive airways (e.g., asthmatics) may react to vapors. See section 11 for additional information.

### **INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:**

- TREATMENT:** Treat symptomatically.

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## **SECTION 5: FIRE-FIGHTING MEASURES**

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### **EXTINGUISHING MEDIA:**

- SUITABLE:** Use water spray, foam, dry chemical or carbon dioxide.
- UNSUITABLE:** None known.

### **SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:**

**UNUSUAL FIRE & EXPLOSION HAZARDS:** Product is not considered a fire hazard, but will burn if ignited. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

**HAZARDOUS COMBUSTION PRODUCTS:** Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See Section 10 Hazardous decomposition products for additional information.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:** Wear self-contained breathing apparatus (SCBA) equipped with a full face piece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations. See section 9 for additional information.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Eliminate ignition sources. Personal Protective Equipment must be worn.

**ENVIRONMENTAL PRECAUTIONS:** Do not flush product into public sewer, water systems or surface waters.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Stop leak if without risk. Move containers from spill area. Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

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**SECTION 7. HANDLING AND STORAGE**

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**PRECAUTIONS FOR SAFE HANDLING:** As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Use under well-ventilated conditions. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Keep away from heat, sparks and open flames. Store dry at 15-40°C, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Empty container contains residual product which may exhibit hazards of product. Do not reuse empty container without commercial cleaning or reconditioning.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**CONTROL PARAMETERS:****OCCUPATIONAL EXPOSURE LIMITS:**

| CHEMICAL NAME              | CAS NUMBER | ACGIH-TWA     | ACGIH-STEL    |
|----------------------------|------------|---------------|---------------|
| Nonylphenol                | 84852-15-3 | Not available | Not available |
| Polyoxypropylenetriamine   | 39423-51-3 | Not available | Not available |
| N-(2-aminoethyl)piperazine | 140-31-8   | Not available | Not available |

**APPOPRIATE ENGINEERING CONTROLS:** Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain air concentrations below occupational exposure standards. When necessary use mechanical handling to reduce human contact with materials.

**INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT (PPE):**

|                                |  |
|--------------------------------|--|
| <b>EYE/FACE PROTECTION:</b>    | Full face shield with safety glasses or goggles underneath are required.   |
| <b>SKIN PROTECTION:</b>        | Wear chemical resistant (impervious) gloves; PVC, neoprene, nitrile rubber, EVAL, butyl rubber. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: lab coat and protective gloves.  |
| <b>RESPIRATORY PROTECTION:</b> | Wear an approved respirator (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self-contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the applicable exposure limit(s) of any chemical substance listed in this SDS. |
| <b>GENERAL PROTECTION:</b>     | Eyewash fountains and safety showers are recommended in the work area.   |

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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|                    |             |   |                     |
|--------------------|-------------|---|---------------------|
| <b>APPEARANCE:</b> | Liquid      | <b>UPPER/LOWER FLAMMABILTY OR EXPLOSIVE LIMITS:</b> | Not available       |
| <b>COLOR:</b>      | Clear amber | <b>VAPOUR PRESSURE:</b>                             | <0.68 mm Hg at 20°C |
| <b>ODOUR:</b>      | Fishy       | <b>VAPOUR DENSITY:</b>                              | Heavier than air    |

# SAFETY DATA SHEET

## TABLE TOP PRO HARDENER

|   |               |   |                  |
|---|---------------|---|------------------|
| <b>ODOUR THRESHOLD:</b>                             | Not available | <b>RELATIVE DENSITY:</b>                            | 0.97             |
| <b>PH:</b>  | Not available | <b>SOLUBILITY(IES):</b>                             | Soluble          |
| <b>MELTING POINT/<br/>FREEZING POINT</b>            | Not available | <b>PARTITION COEFFICIENT<br/>(n-octanol/water):</b> | Not available    |
| <b>INITIAL BOILING POINT<br/>AND BOILING RANGE:</b> | Not available | <b>AUTO-IGNITION TEMPERATURE:</b>                   | Not available    |
| <b>FLASH POINT:</b>                                 | 116°C         | <b>DECOMPOSITION TEMPERATURE:</b>                   | Not available    |
| <b>EVAPORATION RATE:</b>                            | Not available | <b>VISCOSITY:</b>                                   | 1,550 cP at 77°F |
| <b>FLAMMABILITY<br/>(SOLID, GAS):</b>               | Not available |   |                  |

### SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY:** Exothermic reactions including polymerization may occur in contact with strong acids, strong bases, alcohols, strong oxidizing agents and excessive heat.

**CHEMICAL STABILITY:** This product is stable.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Exothermic reactions including polymerization may occur in contact with strong acids, strong bases, alcohols, strong oxidizing agents and excessive heat.

**CONDITIONS TO AVOID:** Excessive heat and ignition sources.

**INCOMPATIBLE MATERIALS:** Avoid strong acids, bases, and oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide, aldehydes, oxides of nitrogen and other products of incomplete combustion.

### SECTION 11. TOXICOLOGICAL INFORMATION

**INFORMATION ON THE LIKELY ROUTES OF EXPOSURE:** Eyes, skin, inhalation and ingestion.

**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:**

|                    |   |
|--------------------|---|
| <b>EYES:</b>       | Causes serious eye damage.  |
| <b>SKIN:</b>       | Causes severe skin burns. May cause allergic skin reaction. May be harmful in contact with skin.  |
| <b>INHALATION:</b> | Harmful if inhaled. Exposure to vapors or mists may cause severe irritation and burns of the nose, throat and respiratory tract.                              |
| <b>INGESTION:</b>  | Harmful if swallowed. Ingestion may cause severe irritation and burns of the mouth, throat and digestive tract. May be fatal if swallowed and enters airways. |

**DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE:** Suspected of damaging fertility or the unborn child.

**ACUTE TOXICITY:**

| CHEMICAL NAME              | LC <sub>50</sub> INHALATION<br>(RAT) | LD <sub>50</sub> ORAL<br>(RAT) | LD <sub>50</sub> DERMAL<br>(RABBIT) |
|----------------------------|--------------------------------------|--------------------------------|-------------------------------------|
| Nonylphenol                | Not available                        | 1,300 mg/kg                    | 3,160 mg/kg                         |
| Polyoxypropylenetriamine   | Not available                        | 550 mg/kg                      | >1,000 mg/kg                        |
| N-(2-aminoethyl)piperazine | Not available                        | 2,140 mg/kg                    | 880 mg/kg                           |

**CORROSION / IRRITATION / SENSITIZATION INFORMATION:**

|                                       |                             |
|---------------------------------------|-----------------------------|
| <b>SKIN CORROSION/IRRITATION:</b>     | Skin Corrosion – Category 1 |
| <b>SERIOUS EYE DAMAGE/IRRITATION:</b> | Eye Damage – Category 1     |

# SAFETY DATA SHEET

## TABLE TOP PRO HARDENER

**RESPIRATORY OR SKIN SENSITIZATION:** Skin Sensitization – Category 1

**CARCINOGENICITY / MUTAGENICITY / REPRODUCTIVE TOXICOLOGY INFORMATION:**

**GERM CELL MUTAGENICITY:** Information is not available.  
**CARCINOGENICITY:** Information is not available.  
**REPRODUCTIVE TOXICITY:** Toxic to Reproduction – Category 2

**SPECIFIC TARGET ORGAN TOXICITY (STOT):**

**STOT-SINGLE EXPOSURE:** Information is not available.  
**STOT-REPEATED EXPOSURE:** Information is not available.

**ASPIRATION HAZARD:** Aspiration Hazard – Category 1

**OTHER INFORMATION:** Additional information is not available.

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### SECTION 12. ECOLOGICAL INFORMATION

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**TOXICITY:**

| CHEMICAL NAME              | TEST           | SPECIES             | RESULT     |
|----------------------------|----------------|---------------------|------------|
| Nonylphenol                | LC50 (96 hrs)  | Lepomis macrochirus | 0.135 mg/L |
|                            | LOEC (96 hrs)  | Lepomis macrochirus | 0.211 mg/L |
|                            | NOEC (96 hrs)  | Fathead minnow      | 0.083 mg/L |
| Polyoxypropylenetriamine   | LC50 (96 hrs)  | Fish                | >100 mg/L  |
|                            | EC50 (48 hrs)  | Daphnia             | 13 mg/L    |
|                            | ErC50 (72 hrs) | Algae               | 4.4 mg/L   |
| N-(2-aminoethyl)piperazine | Not available  |                     |            |

**PERSISTENCE AND DEGRADABILITY:**

| CHEMICAL NAME              | TEST  | PERIOD  | RESULT |
|----------------------------|---|---------|--------|
| Nonylphenol                | Not available                                     |         |        |
| Polyoxypropylenetriamine   | OECD Derived from OECD 301F (Biodegradation Test) | 28 Days | <5%    |
| N-(2-aminoethyl)piperazine | Not available                                     |         |        |

**BIOACCUMULATIVE POTENTIAL:**

| CHEMICAL NAME              | Log P <sub>ow</sub> | BCF           | POTENTIAL     |
|----------------------------|---------------------|---------------|---------------|
| Nonylphenol                | 3.242               | 31            | Low           |
| Polyoxypropylenetriamine   | -1.13               | Not available | Low           |
| N-(2-aminoethyl)piperazine | Not available       | Not available | Not available |

**MOBILITY IN SOIL:**

| CHEMICAL NAME              | SOIL/WATER PARTITION COEFFICIENT (K <sub>oc</sub> ) |
|----------------------------|---|
| Nonylphenol                | Not available                                       |
| Polyoxypropylenetriamine   | Not available                                       |
| N-(2-aminoethyl)piperazine | Not available                                       |

**OTHER ADVERSE EFFECTS:** Additional information is not available

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### SECTION 13. DISPOSAL CONSIDERATIONS

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**DISPOSAL METHODS:** Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate. See section 8 for recommendations on the use of personal protective equipment.

### SECTION 14. TRANSPORTATION INFORMATION

**UN NUMBER:** UN2735

**UN PROPER SHIPPING NAME:**

Amines, Liquid, Corrosive, N.O.S., (Polyoxypropylenetriamine)

**TRANSPORT HAZARD CLASS:**

|  |   |
|--|---|
| <b>U.S. DOT HAZARD CLASS:</b>          | 8 |
| <b>CANADA TDG HAZARD CLASS:</b>        | 8 |
| <b>EUROPE ADR/RID HAZARD CLASS:</b>    | 8 |
| <b>IMDG CODE (OCEAN) HAZARD CLASS:</b> | 8 |
| <b>ICAO/IATA (AIR) HAZARD CLASS:</b>   | 8 |

**PACKING GROUP:** III

**ENVIRONMENTAL HAZARDS:**

|                                   |     |
|-----------------------------------|-----|
| <b>MARINE POLLUTANT:</b>          | Yes |
| <b>HAZARDOUS SUBSTANCE (USA):</b> | No  |

**SPECIAL PRECAUTIONS FOR USER:** Information is not available.

**TRANSPORTING IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:**

Information is not available.

**LABEL FOR CONVEYANCE:**



**OTHER INFORMATION:** ORM-D Consumer Commodity in 1 gal or less containers

### SECTION 15. REGULATORY INFORMATION

**SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE PRODUCT IN QUESTION:**

California Proposition 65 – Warning: the following ingredients present in the product are known to the state of California to cause Cancer:

None known to be present or none in reportable amounts.

California Proposition 65 – Warning: the following ingredients present in the product are known to the state of California to cause birth defects or other reproductive hazards:

None known to be present or none in reportable amounts.

U.S. Superfund Amendments and Reauthorization Act (SARA) – SARA Section 313

Nonylphenol (CAS 84852-15-3)

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV – List of substances subject to authorization, Substances of very high concern

None of the components are listed.

# SAFETY DATA SHEET

## TABLE TOP PRO HARDENER

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Nonylphenol  
(CAS 84852-15-3)

**OTHER REGULATIONS:** Additional information is not available.

**CHEMICAL INVENTORIES:**

|  |   |
|--|---|
| Canadian Domestic Substances List (DSL):                     | Y |
| Canadian Non-Domestic Substances List (NDSL):                | N |
| European Inventory of Existing Chemical Substances (EINECS): | Y |
| European List of Notified Chemical Substances (ELINCS):      | N |
| U.S. Toxic Substances Control Act (TSCA):                    | Y |

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed.

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### SECTION 16. OTHER INFORMATION

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**REVISION DATE:** April 30, 2017

**LEGEND:**

- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR/RID: European dangerous goods transport road and rail regulations
- CAS No: Chemical Abstract Service Registry Number
- DOT: Department of Transportation (U.S.)
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods code
- OEL: Occupational Exposure Limits
- OSHA: Occupational Safety and Health Administration (U.S.)
- PEL: Permissible Exposure Limit
- RQ: Reportable Quantity
- SDS: Safety Data Sheet
- STEL: Short Term Exposure Limit (15 minute Time Weighted Average)
- TDG: Canadian Transportation of Dangerous Goods Act and Regulations
- UN: United Nations
- U.S.: United States

**USERS RESPONSIBILITY/DISCLAIMER OF LIABILITY:**

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

# Safety Data Sheet



## 1. Identification

|                             |  |                         |  |
|-----------------------------|--|-------------------------|--|
| <b>Product Name:</b>        | WATCO 6X946ML LACQUER CLEAR GLOSS WF   | <b>Revision Date:</b>   | 12/7/2016  |
| <b>Product Identifier:</b>  | Y63041   | <b>Supersedes Date:</b> | 6/13/2016  |
| <b>Product Use/Class:</b>   | Topcoat/ Watco Lacquer   |                         |  |
| <b>Supplier:</b>            | Rust-Oleum Consumer Brands Canada (RCBC)<br>200 Confederation Parkway<br>Concord, ON L4K 4T8<br>Canada | <b>Manufacturer:</b>    | Rust-Oleum Consumer Brands Canada (RCBC)<br>200 Confederation Parkway<br>Concord, ON L4K 4T8<br>Canada |
| <b>Preparer:</b>            | Regulatory Department  |                         |  |
| <b>Emergency Telephone:</b> | 24 Hour Hotline: 847-367-7700  |                         |  |

## 2. Hazard Identification

### Classification

### Symbol(s) of Product



### Signal Word

Danger

### Possible Hazards

9% of the mixture consists of ingredient(s) of unknown acute toxicity.

### GHS HAZARD STATEMENTS

|  |      |  |
|--|------|--|
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled.  |
| Carcinogenicity, category 1B           | H350 | May cause cancer.  |
| Flammable Liquid, category 1           | H224 | Extremely flammable liquid and vapour.                             |
| Germ Cell Mutagenicity, category 1B    | H340 | May cause genetic defects.   |
| Reproductive Toxicity, category 2      | H361 | Suspected of damaging fertility or the unborn child.               |
| STOT, repeated exposure, category 2    | H373 | May cause damage to organs through prolonged or repeated exposure. |
| STOT, single exposure, category 3, NE  | H336 | May cause drowsiness or dizziness.                                 |
| Serious Eye Damage, category 1         | H318 | Causes serious eye damage.   |
| Skin Irritation, category 2            | H315 | Causes skin irritation.  |

### GHS LABEL PRECAUTIONARY STATEMENTS

|           |  |
|-----------|--|
| P201      | Obtain special instructions before use.  |
| P210      | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260      | Do not breathe dust/fume/gas/mist/vapours/spray.   |
| P264      | Wash hands thoroughly after handling.  |
| P271      | Use only outdoors or in a well-ventilated area.  |
| P280      | Wear protective gloves/protective clothing/eye protection/face protection.                     |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water.  |

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313

IF exposed or concerned: Get medical advice/attention.

P310

If exposed immediately call a POISON CENTER or doctor/physician.

P321

For specific treatment see label

P332+P313

If skin irritation occurs: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

P370+P378

In case of fire: Use alcohol film forming foam, carbon dioxide, dry chemical, dry sand to extinguish.

P403+P233

Store in a well-ventilated place. Keep container tightly closed.

P403+P235

Store in a well-ventilated place. Keep cool.

P405

Store locked up.

P501

Dispose of contents/container in accordance with local, regional and national regulations.

**GHS SDS PRECAUTIONARY STATEMENTS**

P240

Ground/bond container and receiving equipment.

P241

Use explosion-proof electrical/ventilating/lighting/equipment.

P242

Use only non-sparking tools.

P243

Take precautionary measures against static discharge.

**3. Composition/Information On Ingredients****HAZARDOUS SUBSTANCES**

| <b><u>Chemical Name</u></b>         | <b><u>CAS-No.</u></b> | <b><u>Wt.% Range</u></b> | <b><u>GHS Symbols</u></b> | <b><u>GHS Statements</u></b> |
|-------------------------------------|-----------------------|--------------------------|---------------------------|------------------------------|
| n-Butyl Acetate                     | 123-86-4              | 10-25                    | GHS02-GHS07               | H226-336                     |
| 2-Propanol                          | 67-63-0               | 10-25                    | GHS02-GHS07               | H225-302-319-336             |
| Nitrocellulose                      | 9004-70-0             | 2.5-10                   | GHS01                     | H201                         |
| Methyl Isobutyl Ketone              | 108-10-1              | 2.5-10                   | GHS02-GHS06               | H225-319-331-335             |
| Solvent Naphtha, Light Aromatic     | 64742-95-6            | 2.5-10                   | GHS07-GHS08               | H304-332-340-350             |
| n-Butanol                           | 71-36-3               | 2.5-10                   | GHS02-GHS05-GHS07         | H226-302-315-318-332-335-336 |
| Xylenes (o-, m-, p- isomers)        | 1330-20-7             | 2.5-10                   | GHS02-GHS07               | H226-315-319-332             |
| Toluene                             | 108-88-3              | 2.5-10                   | GHS02-GHS07-GHS08         | H225-304-315-332-336-361-373 |
| 1-Chloro-4-(Trifluoromethyl)Benzene | 98-56-6               | 2.5-10                   | GHS07                     | H315-319-332-335             |
| Ethylbenzene                        | 100-41-4              | 1.0-2.5                  | GHS02-GHS07-GHS08         | H225-304-332-351-373         |

**4. First-aid Measures**

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

## 5. Fire-fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. No unusual fire or explosion hazards noted.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class II combustible liquids. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

## 8. Exposure Controls/Personal Protection

| Chemical Name                           | CAS-No.    | Weight %<br>Less Than | ACGIH TLV-<br>TWA | ACGIH TLV-<br>STEL | OSHA PEL-TWA | OSHA PEL-<br>CEILING |
|---|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| n-Butyl Acetate                         | 123-86-4   | 20.0                  | 50 ppm            | 150 ppm            | 150 ppm      | N.E.                 |
| 2-Propanol                              | 67-63-0    | 15.0                  | 200 ppm           | 400 ppm            | 400 ppm      | N.E.                 |
| Nitrocellulose                          | 9004-70-0  | 10.0                  | N.E.              | N.E.               | N.E.         | N.E.                 |
| n-Butanol                               | 71-36-3    | 10.0                  | 20 ppm            | N.E.               | 100 ppm      | N.E.                 |
| Solvent Naphtha, Light Aromatic         | 64742-95-6 | 10.0                  | N.E.              | N.E.               | N.E.         | N.E.                 |
| Methyl Isobutyl Ketone                  | 108-10-1   | 10.0                  | 20 ppm            | 75 ppm             | 100 ppm      | N.E.                 |
| Xylenes (o-, m-, p- isomers)            | 1330-20-7  | 10.0                  | 100 ppm           | 150 ppm            | 100 ppm      | N.E.                 |
| Toluene                                 | 108-88-3   | 10.0                  | 20 ppm            | N.E.               | 200 ppm      | 300 ppm              |
| 1-Chloro-4-(Trifluoromethyl)<br>Benzene | 98-56-6    | 5.0                   | N.E.              | N.E.               | N.E.         | N.E.                 |
| Ethylbenzene                            | 100-41-4   | 5.0                   | 20 ppm            | N.E.               | 100 ppm      | N.E.                 |

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

## 9. Physical and Chemical Properties

|                                 |                     |  |            |
|---------------------------------|---------------------|--|------------|
| <b>Appearance:</b>              | Liquid              | <b>Physical State:</b>                         | Liquid     |
| <b>Odor:</b>                    | Solvent Like        | <b>Odor Threshold:</b>                         | N.E.       |
| <b>Relative Density:</b>        | 0.947               | <b>pH:</b>                                     | N.A.       |
| <b>Freeze Point, °C:</b>        | N.D.                | <b>Viscosity:</b>                              | N.D.       |
| <b>Solubility in Water:</b>     | Slight              | <b>Partition Coefficient, n-octanol/water:</b> | N.D.       |
| <b>Decomposition Temp., °C:</b> | N.D.                | <b>Explosive Limits, vol%:</b>                 | 0.9 - 12.0 |
| <b>Boiling Range, °C:</b>       | -18 - 537           | <b>Flash Point, °C:</b>                        | 12         |
| <b>Flammability:</b>            | Supports Combustion | <b>Auto-ignition Temp., °C:</b>                | N.D.       |
| <b>Evaporation Rate:</b>        | Slower than Ether   | <b>Vapor Pressure:</b>                         | N.D.       |
| <b>Vapor Density:</b>           | Heavier than Air    |  |            |

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid contact with strong acid and strong bases. Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions. May form peroxides of unknown stability.

## 11. Toxicological information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** May be absorbed through the skin in harmful amounts. Causes skin irritation. Allergic reactions are possible.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B).

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

### ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u>                | <u>Oral LD50</u> | <u>Dermal LD50</u>  | <u>Vapor LC50</u> |
|----------------|-------------------------------------|------------------|---------------------|-------------------|
| 123-86-4       | n-Butyl Acetate                     | 10768 mg/kg Rat  | >17600 mg/kg Rabbit | > 21 mg/L Rat     |
| 67-63-0        | 2-Propanol                          | 1870 mg/kg Rat   | 4059 mg/kg Rabbit   | 72.6 mg/L Rat     |
| 9004-70-0      | Nitrocellulose                      | >5000 mg/kg Rat  | N.I.                | N.I.              |
| 108-10-1       | Methyl Isobutyl Ketone              | 2080 mg/kg Rat   | 3000 mg/kg Rabbit   | 8.2 mg/L Rat      |
| 64742-95-6     | Solvent Naphtha, Light Aromatic     | 8400 mg/kg Rat   | >2000 mg/kg Rabbit  | N.I.              |
| 71-36-3        | n-Butanol                           | 700 mg/kg Rat    | 3402 mg/kg Rabbit   | N.I.              |
| 1330-20-7      | Xylenes (o-, m-, p- isomers)        | 3500 mg/kg Rat   | >4350 mg/kg Rabbit  | 29.08 mg/L Rat    |
| 108-88-3       | Toluene                             | 2600 mg/kg Rat   | 12000 mg/kg Rabbit  | 12.5 mg/L Rat     |
| 98-56-6        | 1-Chloro-4-(Trifluoromethyl)Benzene | 13000 mg/kg Rat  | >2684 mg/kg Rabbit  | N.I.              |
| 100-41-4       | Ethylbenzene                        | 3500 mg/kg Rat   | 15400 mg/kg Rabbit  | 17.4 mg/L Rat     |

N.I. - No Information

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

## 14. Transport Information

|                       | <u>Domestic (USDOT)</u>              | <u>International (IMDG)</u> | <u>Air (IATA)</u> | <u>TDG (Canada)</u>                  |
|-----------------------|--------------------------------------|-----------------------------|-------------------|--------------------------------------|
| UN Number:            | N.A.                                 | 1263                        | 1263              | N.A.                                 |
| Proper Shipping Name: | Paint Products in Limited Quantities | Paint                       | Paint             | Paint Products in Limited Quantities |
| Hazard Class:         | N.A.                                 | 3                           | 3                 | N.A.                                 |
| Packing Group:        | N.A.                                 | II                          | II                | N.A.                                 |
| Limited Quantity:     | Yes                                  | Yes                         | No                | Yes                                  |

## 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Reactive Hazard, Acute Health Hazard, Chronic Health Hazard

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u>         | <u>CAS-No.</u> |
|------------------------------|----------------|
| n-Butanol                    | 71-36-3        |
| Methyl Isobutyl Ketone       | 108-10-1       |
| Xylenes (o-, m-, p- isomers) | 1330-20-7      |
| Toluene                      | 108-88-3       |
| Ethylbenzene                 | 100-41-4       |

#### Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

| <u>Chemical Name</u>                | <u>CAS-No.</u> |
|-------------------------------------|----------------|
| 1-Chloro-4-(Trifluoromethyl)Benzene | 98-56-6        |

**16. Other Information****HMIS RATINGS**

**Health:** 2\*      **Flammability:** 3      **Physical Hazard:** 0      **Personal Protection:** X

**NFPA RATINGS**

**Health:** 2      **Flammability:** 3      **Instability:** 0

**VOLATILE ORGANIC COMPOUNDS, g/L:** 666

**SDS REVISION DATE:** 12/7/2016

**REASON FOR REVISION:** Regulatory Formula Source Changed  
Product Composition Changed  
Substance and/or Product Properties Changed in Section(s):  
02 - Hazard Identification  
05 - Fire-fighting Measures  
16 - Other Information  
Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Consumer Brands Canada believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Consumer Brands Canada makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.



**TAMKO BUILDING PRODUCTS, INC. SAFETY DATA SHEET – T10M2015****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****TRADE NAME:** TAMKO TAM-SEAL Roof Patch Cartridge**LABEL:** TAMKO**PRODUCT USE & DESCRIPTION:** Roofing Cements**CHEMICAL FAMILY:** Asphalt Mixture**MANUFACTURED BY:**

TAMKO Building Products, Inc.

P. O. Box 1404

Joplin, MO 64802-1404

www.TAMKO.com

**EMERGENCY TELEPHONE NUMBERS:**

General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)

Chemtrec: 1-800-424-9300 (24 HOURS)

**2. HAZARDS IDENTIFICATION****SIGNAL WORD:** Danger**GHS CLASSIFICATION:**

Carcinogenicity – Category 1A

Skin Irritation – Category 2

Eye Irritation – Category 2B

Specific Target Organ Toxicity, Repeated Exposure – Category 1

Flammable Liquid – Category 3

**HAZARD STATEMENTS:**

May cause cancer.

Causes skin and eye irritation.

Causes damage to organs through prolonged or repeated exposure.

Flammable liquid and vapor.

Additional hazard information: Can cause silicosis and other permanent lung damage.

**PRECAUTIONARY STATEMENTS:**Prevention

Obtain special instructions before use.

Do not breathe dust/fume/mist/vapors/spray.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Use explosion-proof equipment.

Keep container tightly closed.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Take precautionary measures against static discharge.

Keep away heat/sparks/open flames/hot surfaces. - No smoking.

Wash hands and exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Response

If on skin: Wash with plenty of water.

Get medical advice/attention: If exposed or concerned or you feel unwell, if eye and or skin irritation persists.

Specific treatment: See section 4-First Aid

In case of fire: See Section 5.

If on skin (or hair): Take off immediately all contaminated clothing, wash before reuse. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

Store locked up, in a well-ventilated place. Keep cool.

Disposal

Dispose in accordance with Federal, State, and Local regulations. (See section 13 for additional information).

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Components                            | CAS No.                  | % by Weight |
|---------------------------------------|--------------------------|-------------|
| Asphalt                               | 8052-42-4                | 40-53       |
| Limestone*                            | 1317-65-3                | 20-30       |
| Mineral Spirits                       | 8052-41-3                | 15-21       |
| Clay*                                 | 12174-11-7 and 1332-58-7 | 5-14        |
| Cellulose fibers                      | 9004-34-6                | 5-9         |
| *Contains Crystalline Silica (Quartz) | 14808-60-7               | 0-1         |

NE = not established

**4. FIRST AID MEASURES****EYE CONTACT:** Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.**SKIN CONTACT:** Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be without pumice. Do not use solvents or thinners to remove material from skin. Get medical attention if irritation persists or develops.**INGESTION:** If swallowed, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.**INHALATION:** If inhalation of dust occurs remove person to fresh air. Drink water to clear throat or blow nose to clear. If not breathing, give artificial respiration or give oxygen by trained personnel and get immediate medical attention.**NOTES TO PHYSICIAN:** Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Dry chemical, CO<sub>2</sub>, or foam fire extinguisher should be used. Avoid use of straight-stream water.

**SPECIAL FIRE FIGHTING PROCEDURES:** Flammable. Avoid breathing fumes. Firefighters should not enter confined spaces without wearing NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** When heated, fumes may burn if ignition source is provided. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source. Burning product may cause thick black smoke. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

**SEE SECTION 10 FOR COMBUSTION PRODUCTS**

## 6. ACCIDENTAL RELEASE MEASURES

**PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED:** Flammable. Handling equipment must be grounded to prevent sparking. Remove ignition sources, ventilate area, and avoid inhalation, eye or skin contact by using appropriate precautions outlined in Section 8 of this SDS. Stop leak and contain spilled material with absorbent material. Collect adsorbed product and clean up materials in appropriate container for proper disposal. Move containers from spill area. For larger spills, keep unnecessary people away. Stay upwind of and away from spill. Notify proper authorities. Prevent materials from entering drains, sewers, or waterways. Spills entering surface waters or sewers entering/leading to surface waters that cause a sheen must be reported to the National Response Center 1-800-424-8802.

**WASTE DISPOSAL METHODS:** This product could be classified as a hazardous waste due to ignitability. Dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.

## 7. HANDLING AND STORAGE

**STORAGE TEMPERATURE:** Store away from heat and all ignition sources and open flames in accordance with applicable laws and regulations.

**THIS PRODUCT SHOULD NOT BE HEATED OR BURNED USING A DIRECT FLAME DEVICE.**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Follow recommended work practices and use recommended personal protective clothing and equipment. See Section 8 of this SDS. Avoid all ignition sources. Storage areas should be ventilated to reduce fire and explosion hazards, and possible overexposure of personnel to fumes and vapors. Keep containers closed when not in use. Do not store near food and beverages or smoking materials. Empty containers retain residue (liquid and/or vapor) and can be dangerous. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Do not attempt to clean since residue is difficult to remove. For work on tanks, refer to OSHA regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations. See Section 13 for disposal.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE LIMITS

| Components                 | CAS No.    | OSHA                    |      | ACGIH   |      | Unit              |
|----------------------------|------------|-------------------------|------|---------|------|-------------------|
|                            |            | TWA                     | STEL | TWA     | STEL |                   |
| Raw Products               |            |                         |      |         |      |                   |
| Asphalt                    | 8052-42-4  | NE                      | NE   | 0.5** I | NE   | mg/m <sup>3</sup> |
| Limestone†                 | 1317-65-3  | 15/5***                 | NE   | 10/3*** | NE   | mg/m <sup>3</sup> |
| Mineral Spirits            | 8052-41-3  | 500                     | NE   | 100     | NE   | ppm               |
| Clay†                      | 12174-11-7 | 15/5***                 | NE   | 10/3*** | NE   | mg/m <sup>3</sup> |
| Cellulose fibers           | 9004-34-6  | 15/5***                 | NE   | 10/3*** | NE   | mg/m <sup>3</sup> |
| †Crystalline Silica Quartz | 14808-60-7 | See 1910.1000 Table Z.3 | NE   | 0.025   | NE   | mg/m <sup>3</sup> |

NE= Not established

\* Note: Due to the form of the product, hazardous exposures from this product are not expected to occur. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.

\*\* Asphalt Fume as benzene-soluble inhalable aerosol (Bitumen)

I = Inhalable Fraction

\*\*\* Total Nuisance Dust/Respirable Dust

**RESPIRATORY PROTECTION:** Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can be exceeded, use a NIOSH approved air-purifying respirator. If concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator/SCBA use, fitting, training standards, and regulations.

**VENTILATION:** Use only with adequate ventilation to maintain exposures below applicable exposure limits. Local exhaust ventilation and/or enclosure of the process may be required. All equipment must be explosion proof.

**EYE PROTECTION:** Chemical safety goggles with side-shields or face shield must be used if eye contact is possible.

**SKIN:** Chemical resistant gloves, apron, or other protective clothing needed to prevent skin contact. . Remove and clean contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Black, putty-like material with solvent odor.  
**Odor Threshold:** Not Applicable  
**pH:** Not Applicable  
**Boiling Point:** 320 °F  
**Melting Point:** No Data Available  
**Flash Point:** 112 °F COC  
**Autoignition Temperature:** 460 °F  
**Viscosity:** Not Applicable  
**Decomposition Temperature:** No Data Available

**Upper/Lower Flammability or Explosive Limits:** 7.0 / 0.8  
**Vapor Pressure:** 2mm @ 70 °F  
**Vapor Density (Air = 1):** 5  
**Specific Gravity/Relative Density:** 1.0 – 1.23  
**Solubility (IES):** Negligible  
**Initial Boiling Point and Boiling Range:** No Data Available  
**Evaporation Rate (Butyl Acetate = 1):** <0.1  
**Flammability(Solid and Gas):** Not Applicable  
**Partition Coefficient: N-Octanol/Water:** No Data Available

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable

**REACTIVITY:** Non-reactive.

**CONDITIONS TO AVOID:** Keep from heat, sparks, open flame and other sources of ignition. Avoid contact with strong oxidizing agents. Prevent vapor accumulation. **THIS PRODUCT SHOULD NOT BE HEATED OR BURNED USING A DIRECT FLAME DEVICE.**

**HAZARDOUS REACTION:** Polymerization will not occur.

**INCOMPATIBILITY (MATERIALS TO AVOID):** Strong acids or bases, oxidizing agents and selected amines.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons.

## 11. TOXICOLOGICAL INFORMATION

**EYE** – Can cause eye irritation.

**SKIN** – Can cause skin irritation.

**INHALATION** – Cured product particles, fume and vapor may cause upper respiratory irritation.

**INGESTION** – May cause harmful effects if swallowed.

### THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

#### **SILICA**

**Cancer** - This product contains crystalline silica (quartz). IARC has determined that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). IARC concluded that there was sufficient evidence in humans and animals for the carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources. The NTP has classified silica as known to be a human carcinogen. The physical nature of this product may help limit any inhalation hazard from crystalline silica during application and in its hardened state. However, physical forces such as sawing, grinding, drilling and other demolition work on this product may liberate crystalline silica dust.

**Acute Effects** - Exposure to silica dust can cause irritation of the eyes, nose and throat. Exposure to high concentrations can also cause Accelerated Silicosis causing progressive shortness of breath, fever, coughing, and weight loss.

**Chronic Effects** – In addition to cancer, breathing of silica over a period of time can cause damage to the lung tissue or silicosis after long exposure at low concentrations causing shortness of breath, fever, coughing, and weight loss. Prolonged and repeated exposure to respirable silica-containing dust may cause autoimmune disease, kidney disease, tuberculosis, and nonmalignant respiratory disease, and bronchitis.

#### **PETROLEUM HYDROCARBON SOLVENT (MINERAL SPIRITS)**

**Cancer** - This product contains petroleum hydrocarbon solvent. This product also may contain small amounts of polyaromatic hydrocarbons and other hydrocarbons that are recognized carcinogens in humans and experimental animals.

**Acute Effects** - Inhalation of cured product particles, fumes, vapors, or mist may cause nose, throat, lung, and mucous membrane irritation. Inhalation may cause central nervous system depression. Eye contact may cause irritation, stinging, tearing, redness, and swelling. If ingested, may cause mouth, throat and gastrointestinal tract irritation and upset with possible nausea, vomiting and dizziness, staggering gait, drowsiness, loss of consciousness, and delirium, as well as additional central nervous system effects. Aspiration into the lungs during vomiting may result in severe lung damage or death.

**Chronic Effects** - Chronic effects may include damage to the following target organs: kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, central nervous system, eye, lens or cornea, and/or auditory system. Reports have associated prolonged or repeated occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by deliberately inhaling vapors of this product may be harmful or fatal. Chronic effects of ingestion and subsequent aspiration into the lungs may cause chronic lung dysfunction.

#### **ASPHALT**

**Cancer** - This product contains cutback asphalt. In 1987 IARC classified "extracts of steam and air- refined bitumens" (cutback asphalt) as Group 2B, "possibly carcinogenic to humans." In 2011 IARC did not specifically classify cutback asphalt as Group 2B. NIOSH has also concluded that the fumes of heated roofing asphalt are a potential occupational carcinogen. Asphalt may also cause irritation of the respiratory tract. The physical nature of this product may help limit any inhalation hazard from asphalt after curing. However, physical forces such as sawing, grinding, drilling and other demolition work on this product may liberate cured product particles containing asphalt. Burning or heating of the product may cause fumes, vapors or mists.

**Acute Effects** - Inhalation of cured product particles, fumes, or vapors may cause nose, throat, and mucous membrane irritation. Eye contact may cause severe irritation, redness, tearing, and blurred vision. If ingested, may cause mouth, throat and gastrointestinal tract irritation and upset with possible nausea, vomiting and diarrhea.

**Chronic Effects** - In addition to cancer, prolonged or repeated skin contact may result in dryness and irritation of the skin. Long term skin exposure to asphalt can increase sensitivity to the sun, and may cause discoloration. Asphalt may also cause irritation of the respiratory tract.

## 12. ECOLOGICAL INFORMATION:

**Ecotoxicity** – No specific data available on this product. Product may cause mechanical damage to aquatic organisms. The mineral spirits components is expected to volatilize in the environment and to be moderately toxic to both freshwater and marine organisms.

**Persistence and degradability** – No data available

**Bioaccumulative potential** – No data available

**Mobility in Soil** – No data available

**Other adverse effects (GHG, Ozone)** - No data available

## 13. DISPOSAL CONSIDERATIONS:

This product could be classified as a hazardous waste due to ignitability. Dispose in accordance with Federal, State, and Local regulations. Prevent materials from entering drains, sewers, or waterways. Do not dump on the ground. Do not burn.

**14. TRANSPORT INFORMATION:**

This product is regulated as a hazardous material for transport under 49 CFR and for vessel transport under the IMDG Code.

**DOT PROPER SHIPPING NAME:** TARS, LIQUID

**DOT HAZARD CLASSIFICATION:** Combustible liquid, non-hazardous in non-bulk quantities (less than 119 gallons each). This exception to 49 CFR cited at 173.150(f).

**DOT LABELING REQUIREMENTS:** Combustible liquid

**UN/NA NUMBER:** UN 1999

**PACKING GROUP:** PG III

**IMDG CODE:** Hazardous for vessel transport under the IMDG Code

**IMDG SHIPPING NAME:** Tars, liquid

**IMDG HAZARD CLASS:** 3

**UN/ID NUMBER:** UN 1999

**PACKING GROUP NUMBER:** PG III

**15. REGULATORY INFORMATION**

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** Some components in this product are listed on the TSCA Inventory.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):** None

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:**

**Section 302 Extremely Hazardous Substances:** None

**Section 311/312 Hazard Categories:** Immediate Health; Delayed Health; Fire Hazard

**Section 313 Reportable Ingredients:** None

**California Proposition 65: WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**16. OTHER INFORMATION**

|                     |                     |
|---------------------|---------------------|
| <b>HMIS Rating:</b> | <b>NFPA Rating:</b> |
| Health - * 2        | Health - 2          |
| Flammability - 2    | Flammability - 2    |
| Reactivity - 0      | Reactivity - 0      |

Preparation Date: **April 2015**

**Disclaimer of Liability**

The information and recommendations contained herein are to the best of **TAMKO Building Products, Inc.**'s knowledge and belief, accurate and reliable as of the date issued. **TAMKO Building Products, Inc.** does not warrant or guarantee their accuracy or reliability, and **TAMKO Building Products, Inc.** shall not be liable for any loss or damage arising out of the use thereof.

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy his or herself that they are suitable and complete for the user's particular use.

# SAFETY DATA SHEET

B66T204

## Section 1. Identification

**Product name** : DTM ACRYLIC Semi-Gloss Acrylic Coating  
Ultradeep Base

**Product code** : B66T204

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**  
Paint or paint related material.

**Manufacturer** : THE SHERWIN-WILLIAMS COMPANY  
101 W. Prospect Avenue  
Cleveland, OH 44115

**National contact** : Sherwin-Williams Canada Inc.  
180 Brunel Road  
Mississauga, Ontario L4Z 1T5 Canada

**Emergency telephone number of the company** : US / Canada: (800) 424-9300  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 524-5979  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

## Section 2. Hazards identification

**Classification of the substance or mixture** : CARCINOGENICITY - Category 1A  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 4.5% (oral), 4.5% (dermal), 4.5% (inhalation)

### GHS label elements

**Hazard pictograms**



**Signal word** : Danger

**Hazard statements** : May cause cancer.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

|   |  |                     |      |
|---|--|---------------------|------|
| <b>Date of issue/Date of revision</b> : 6/15/2022 | <b>Date of previous issue</b> : 9/28/2021                | <b>Version</b> : 12 | 1/13 |
| B66T204   | DTM ACRYLIC Semi-Gloss Acrylic Coating<br>Ultradeep Base | SHW-85-NA-GHS-CA    |      |

## Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Do not breathe vapor.
- Response** : IF exposed or concerned: Get medical advice or attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** **WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **FOR INDUSTRIAL USE ONLY.** Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.** Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure.
- This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**

| <b>Ingredient name</b>          | <b>% by weight</b> | <b>CAS number</b> |
|---------------------------------|--------------------|-------------------|
| 2-(2-Methoxyethoxy)-ethanol     | 4.53               | 111-77-3          |
| Cristobalite, respirable powder | 0.16               | 14464-46-1        |
| Heavy Paraffinic Oil            | 0.12               | 64742-65-0        |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

|   |  |                     |      |
|---|--|---------------------|------|
| <b>Date of issue/Date of revision</b> : 6/15/2022 | <b>Date of previous issue</b> : 9/28/2021                | <b>Version</b> : 12 | 2/13 |
| B66T204   | DTM ACRYLIC Semi-Gloss Acrylic Coating<br>Ultradeep Base | SHW-85-NA-GHS-CA    |      |

## Section 4. First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

| Ingredient name  | CAS #                  | Exposure limits   |
|--|------------------------|---|
| 2-(2-Methoxyethoxy)-ethanol<br>Cristobalite, respirable powder | 111-77-3<br>14464-46-1 | None.<br><b>OSHA PEL Z3 (United States, 6/2016).</b><br>TWA: 250 mppcf / 2 x (%SiO <sub>2</sub> +5) 8 hours.<br>Form: Respirable<br>TWA: 10 mg/m <sup>3</sup> / 2 x (%SiO <sub>2</sub> +2) 8 hours.<br>Form: Respirable<br>TWA: 30 mg/m <sup>3</sup> / 2 x (%SiO <sub>2</sub> +2) 8 hours.<br>Form: Total dust<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 50 µg/m <sup>3</sup> 8 hours. Form: Respirable dust<br><b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 0.025 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction<br><b>NIOSH REL (United States, 10/2020).</b><br>TWA: 0.05 mg/m <sup>3</sup> 10 hours. Form: respirable dust |
| Heavy Paraffinic Oil   | 64742-65-0             | <b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 5 mg/m <sup>3</sup> 8 hours.<br><b>NIOSH REL (United States, 10/2020).</b><br>TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist  |

#### Occupational exposure limits (Canada)

## Section 8. Exposure controls/personal protection

| Ingredient name | CAS #      | Exposure limits   |
|-----------------|------------|---|
| Cristobalite    | 14464-46-1 | <b>CA British Columbia Provincial (Canada, 6/2021).</b><br>TWA: 0.025 mg/m <sup>3</sup> 8 hours. Form: Respirable<br><b>CA Quebec Provincial (Canada, 6/2021).</b><br>TWAEV: 0.05 mg/m <sup>3</sup> 8 hours. Form: Respirable dust.<br><b>CA Alberta Provincial (Canada, 6/2018).</b><br>8 hrs OEL: 0.025 mg/m <sup>3</sup> 8 hours. Form: Respirable particulate<br><b>CA Ontario Provincial (Canada, 6/2019).</b><br>TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: Respirable particulate matter.<br><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br>TWA: 0.05 mg/m <sup>3</sup> 8 hours. Form: respirable fraction |
| 2-Butoxyethanol | 111-76-2   | <b>CA Alberta Provincial (Canada, 6/2018).</b><br>8 hrs OEL: 97 mg/m <sup>3</sup> 8 hours.<br>8 hrs OEL: 20 ppm 8 hours.<br><b>CA British Columbia Provincial (Canada, 6/2021).</b><br>TWA: 20 ppm 8 hours.<br><b>CA Ontario Provincial (Canada, 6/2019).</b><br>TWA: 20 ppm 8 hours.<br><b>CA Quebec Provincial (Canada, 6/2021).</b><br>TWAEV: 20 ppm 8 hours.<br><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br>STEL: 30 ppm 15 minutes.<br>TWA: 20 ppm 8 hours.   |

### Occupational exposure limits (Mexico)

| Ingredient name | CAS # | Exposure limits |
|-----------------|-------|-----------------|
| None.           |       |                 |

### **Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### **Environmental exposure controls**

: **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 9
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : 100°C (212°F)
- Flash point** : Closed cup: Not applicable.
- Evaporation rate** : 0.09 (butyl acetate = 1)
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Lower: 0.6%  
Upper: 9.5%
- Vapor pressure** : 2.3 kPa (17.5 mm Hg)
- Relative vapor density** : 1 [Air = 1]
- Relative density** : 1.06
- Solubility** : Not available.

## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Partition coefficient: n-octanol/water</b> | : Not applicable.  |
| <b>Auto-ignition temperature</b>              | : Not available.   |
| <b>Decomposition temperature</b>              | : Not available.   |
| <b>Viscosity</b>                              | : Kinematic (40°C (104°F)): >20.5 mm <sup>2</sup> /s (>20.5 cSt) |
| <b>Molecular weight</b>                       | : Not applicable.  |
| <b>Aerosol product</b>                        |  |
| <b>Heat of combustion</b>                     | : 2.898 kJ/g   |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| <b>Chemical stability</b>                 | : The product is stable.   |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>Conditions to avoid</b>                | : No specific data.  |
| <b>Incompatible materials</b>             | : No specific data.  |
| <b>Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result      | Species | Dose        | Exposure |
|-------------------------|-------------|---------|-------------|----------|
| Heavy Paraffinic Oil    | LD50 Dermal | Rabbit  | >5000 mg/kg | -        |
|                         | LD50 Oral   | Rat     | >5000 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name     | Result                   | Species | Score | Exposure        | Observation |
|-----------------------------|--------------------------|---------|-------|-----------------|-------------|
| 2-(2-Methoxyethoxy)-ethanol | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 mg | -           |
|                             | Eyes - Moderate irritant | Rabbit  | -     | 500 mg          | -           |

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

| Product/ingredient name         | OSHA | IARC | NTP                             |
|---------------------------------|------|------|---------------------------------|
| Cristobalite, respirable powder | -    | 1    | Known to be a human carcinogen. |

## Section 11. Toxicological information

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

| Name                        | Category                 | Route of exposure | Target organs                                    |
|-----------------------------|--------------------------|-------------------|--|
| 2-(2-Methoxyethoxy)-ethanol | Category 3<br>Category 3 | -                 | Respiratory tract irritation<br>Narcotic effects |

### Specific target organ toxicity (repeated exposure)

| Name   | Category                 | Route of exposure | Target organs          |
|--|--------------------------|-------------------|------------------------|
| 2-(2-Methoxyethoxy)-ethanol<br>Cristobalite, respirable powder | Category 2<br>Category 1 | -<br>inhalation   | -<br>respiratory tract |

### Aspiration hazard

| Name                 | Result                         |
|----------------------|--------------------------------|
| Heavy Paraffinic Oil | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations  
**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

## Section 11. Toxicological information

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.  
**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : Suspected of damaging the unborn child.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name     | Result   | Species   | Exposure             |
|-----------------------------|--|---|----------------------|
| 2-(2-Methoxyethoxy)-ethanol | Acute EC50 >930 ppm Fresh water<br>Acute LC50 7500000 µg/l Fresh water | Daphnia - Daphnia magna<br>Fish - Lepomis macrochirus | 48 hours<br>96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient ( $K_{oc}$ )** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

## Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                       | <b>DOT<br/>Classification</b> | <b>TDG<br/>Classification</b> | <b>Mexico<br/>Classification</b> | <b>IATA</b>    | <b>IMDG</b>    |
|---------------------------------------|-------------------------------|-------------------------------|----------------------------------|----------------|----------------|
| <b>UN number</b>                      | Not regulated.                | Not regulated.                | Not regulated.                   | Not regulated. | Not regulated. |
| <b>UN proper<br/>shipping name</b>    | -                             | -                             | -                                | -              | -              |
| <b>Transport<br/>hazard class(es)</b> | -                             | -                             | -                                | -              | -              |
| <b>Packing group</b>                  | -                             | -                             | -                                | -              | -              |
| <b>Environmental<br/>hazards</b>      | No.                           | No.                           | No.                              | No.            | No.            |
| <b>Additional<br/>information</b>     | -                             | -                             | -                                | -              | -              |

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according  
to IMO instruments :** Not available.

**Proper shipping name :** Not available.

## Section 15. Regulatory information

This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

### International regulations

#### International lists

: **Australia inventory (AIIIC):** Not determined.  
**China inventory (IECSC):** Not determined.  
**Japan inventory (CSCL):** Not determined.  
**Japan inventory (ISHL):** Not determined.  
**Korea inventory (KECI):** Not determined.  
**New Zealand Inventory of Chemicals (NZIoC):** Not determined.  
**Philippines inventory (PICCS):** Not determined.  
**Taiwan Chemical Substances Inventory (TCSI):** Not determined.  
**Thailand inventory:** Not determined.  
**Turkey inventory:** Not determined.  
**Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 2 |
| Flammability     |   | 0 |
| Physical hazards |   | 0 |
|                  |   |   |

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

| Classification  | Justification      |
|---|--------------------|
| CARCINOGENICITY - Category 1A                                   | Calculation method |
| TOXIC TO REPRODUCTION - Category 2                              | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |

### History

**Date of printing** : 6/15/2022

**Date of issue/Date of revision** : 6/15/2022

**Date of previous issue** : 9/28/2021

**Version** : 12

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

|   |  |                     |       |
|---|--|---------------------|-------|
| <b>Date of issue/Date of revision</b> : 6/15/2022 | <b>Date of previous issue</b> : 9/28/2021                | <b>Version</b> : 12 | 12/13 |
| B66T204   | DTM ACRYLIC Semi-Gloss Acrylic Coating<br>Ultradeep Base | SHW-85-NA-GHS-CA    |       |

## Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

SGG = Segregation Group

UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

# SAFETY DATA SHEET

B54W151

## Section 1. Identification

**Product name** : PRO INDUSTRIAL™ Urethane Alkyd Enamel  
Extra White

**Product code** : B54W151

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : THE SHERWIN-WILLIAMS COMPANY  
101 W. Prospect Avenue  
Cleveland, OH 44115

**National contact** : Sherwin-Williams Canada Inc.  
180 Brunel Road  
Mississauga, Ontario L4Z 1T5 Canada

**Emergency telephone number of the company** : US / Canada: (800) 424-9300  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 524-5979  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

## Section 2. Hazards identification

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 3  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 24.3% (oral), 24.3% (dermal), 24.3% (inhalation)

### GHS label elements

## Section 2. Hazards identification

### Hazard pictograms



### Signal word

: Danger

### Hazard statements

: Flammable liquid and vapor.  
May be fatal if swallowed and enters airways.  
May cause an allergic skin reaction.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

#### Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Contaminated work clothing must not be allowed out of the workplace.

#### Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.

#### Storage

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

#### Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Supplemental label elements

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.

This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

### Hazards not otherwise classified

: DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

| Ingredient name                           | % by weight | CAS number |
|---|-------------|------------|
| Light Aliphatic Hydrocarbon               | 24.28       | 64742-47-8 |
| Titanium Dioxide                          | 21.53       | 13463-67-7 |
| Xylene, mixed isomers                     | 0.88        | 1330-20-7  |
| Hydrotreated Heavy Petroleum Naphtha      | 0.78        | 64742-48-9 |
| Methyl Ethyl Ketoxime                     | 0.51        | 96-29-7    |
| Methyl Isobutyl Ketone                    | 0.39        | 108-10-1   |
| Calcium 2-Ethylhexanoate                  | 0.21        | 136-51-6   |
| 2-(2-Methoxyethoxy)-ethanol               | 0.19        | 111-77-3   |
| Zirconium 2-Ethylhexanoate                | 0.17        | 22464-99-9 |
| Ethylbenzene                              | 0.16        | 100-41-4   |
| Med. Aliphatic Hydrocarbon Solvent        | 0.11        | 64742-88-7 |
| 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol | 0.1         | 77-99-6    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

|   |  |                     |      |
|---|--|---------------------|------|
| <b>Date of issue/Date of revision</b> : 6/18/2022 | <b>Date of previous issue</b> : 4/14/2022            | <b>Version</b> : 22 | 3/19 |
| B54W151   | PRO INDUSTRIAL™ Urethane Alkyd Enamel<br>Extra White | SHW-85-NA-GHS-CA    |      |

## Section 4. First aid measures

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

## Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

| Ingredient name  | CAS #                 | Exposure limits  |
|--|-----------------------|--|
| Light Aliphatic Hydrocarbon                                | 64742-47-8            | <b>ACGIH TLV (United States, 1/2021). Absorbed through skin.</b><br>TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.   |
| Titanium Dioxide   | 13463-67-7            | <b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 10 mg/m <sup>3</sup> 8 hours.  |
| Xylene, mixed isomers                                      | 1330-20-7             | <b>OSHA PEL (United States, 5/2018).</b><br>TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust<br><b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 434 mg/m <sup>3</sup> 8 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 651 mg/m <sup>3</sup> 15 minutes.<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 435 mg/m <sup>3</sup> 8 hours. |
| Hydrotreated Heavy Petroleum Naphtha Methyl Ethyl Ketoxime | 64742-48-9<br>96-29-7 | None.  |
| Methyl Isobutyl Ketone                                     | 108-10-1              | <b>OARS WEEL (United States, 1/2021). Skin sensitizer.</b><br>TWA: 10 ppm 8 hours.<br><b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 20 ppm 8 hours.  |

## Section 8. Exposure controls/personal protection

|   |                                    |  |
|---|------------------------------------|--|
| Calcium 2-Ethylhexanoate<br>2-(2-Methoxyethoxy)-ethanol<br>Zirconium 2-Ethylhexanoate | 136-51-6<br>111-77-3<br>22464-99-9 | STEL: 75 ppm 15 minutes.<br><b>NIOSH REL (United States, 10/2020).</b><br>TWA: 50 ppm 10 hours.<br>TWA: 205 mg/m <sup>3</sup> 10 hours.<br>STEL: 75 ppm 15 minutes.<br>STEL: 300 mg/m <sup>3</sup> 15 minutes.<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 410 mg/m <sup>3</sup> 8 hours.<br>None.<br>None.<br><b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.<br>STEL: 10 mg/m <sup>3</sup> , (as Zr) 15 minutes.<br><b>NIOSH REL (United States, 10/2020).</b><br>TWA: 5 mg/m <sup>3</sup> , (as Zr) 10 hours.<br>STEL: 10 mg/m <sup>3</sup> , (as Zr) 15 minutes.<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.<br><b>ACGIH TLV (United States, 1/2021).</b><br>TWA: 20 ppm 8 hours. |
| Ethylbenzene  | 100-41-4                           | <b>NIOSH REL (United States, 10/2020).</b><br>TWA: 100 ppm 10 hours.<br>TWA: 435 mg/m <sup>3</sup> 10 hours.<br>STEL: 125 ppm 15 minutes.<br>STEL: 545 mg/m <sup>3</sup> 15 minutes.<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 435 mg/m <sup>3</sup> 8 hours.<br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 400 mg/m <sup>3</sup> 8 hours.<br>None.  |
| Med. Aliphatic Hydrocarbon Solvent  | 64742-88-7                         |  |
| 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol   | 77-99-6                            |  |

### Occupational exposure limits (Canada)

| Ingredient name                                   | CAS #      | Exposure limits   |
|---|------------|---|
| Petroleum refining, hydrotreated light distillate | 64742-47-8 | <b>CA British Columbia Provincial (Canada, 6/2021). Absorbed through skin.</b><br>TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours.<br><b>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</b><br>8 hrs OEL: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours.<br><b>CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.</b><br>TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours. |
| Titanium dioxide                                  | 13463-67-7 | <b>CA British Columbia Provincial (Canada, 6/2021).</b><br>TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust<br>TWA: 3 mg/m <sup>3</sup> 8 hours. Form: respirable fraction<br><b>CA Quebec Provincial (Canada, 6/2021).</b><br>TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Total dust.  |

## Section 8. Exposure controls/personal protection

|                            |            |   |
|----------------------------|------------|---|
| Xylene                     | 1330-20-7  | <p><b>CA Alberta Provincial (Canada, 6/2018).</b><br/>8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b><br/>TWA: 10 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/>STEL: 20 mg/m<sup>3</sup> 15 minutes.<br/>TWA: 10 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 6/2018).</b><br/>8 hrs OEL: 100 ppm 8 hours.<br/>15 min OEL: 651 mg/m<sup>3</sup> 15 minutes.<br/>15 min OEL: 150 ppm 15 minutes.<br/>8 hrs OEL: 434 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 6/2021).</b><br/>TWA: 100 ppm 8 hours.<br/>STEL: 150 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 6/2021).</b><br/>TWA EV: 100 ppm 8 hours.<br/>TWA EV: 434 mg/m<sup>3</sup> 8 hours.<br/>STEV: 150 ppm 15 minutes.<br/>STEV: 651 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b><br/>STEL: 150 ppm 15 minutes.<br/>TWA: 100 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/>STEL: 150 ppm 15 minutes.<br/>TWA: 100 ppm 8 hours.</p> |
| Methyl Ethyl Ketoxime      | 96-29-7    | <p><b>OARS WEEL (United States, 1/2021). Skin sensitizer.</b><br/>TWA: 10 ppm 8 hours.</p>  |
| Methyl isobutyl ketone     | 108-10-1   | <p><b>CA Alberta Provincial (Canada, 6/2018).</b><br/>8 hrs OEL: 205 mg/m<sup>3</sup> 8 hours.<br/>8 hrs OEL: 50 ppm 8 hours.<br/>15 min OEL: 75 ppm 15 minutes.<br/>15 min OEL: 307 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 6/2021).</b><br/>TWA: 20 ppm 8 hours.<br/>STEL: 75 ppm 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b><br/>TWA: 20 ppm 8 hours.<br/>STEL: 75 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 6/2021).</b><br/>TWA EV: 20 ppm 8 hours.<br/>STEV: 75 ppm 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/>STEL: 75 ppm 15 minutes.<br/>TWA: 50 ppm 8 hours.</p>   |
| Zirconium 2-Ethylhexanoate | 22464-99-9 | <p><b>CA Alberta Provincial (Canada, 6/2018).</b><br/>8 hrs OEL: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.<br/>15 min OEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 6/2021).</b><br/>TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.</p>   |

## Section 8. Exposure controls/personal protection

|              |          |   |
|--------------|----------|---|
| Ethylbenzene | 100-41-4 | <p>STEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.<br/> <b>CA Quebec Provincial (Canada, 6/2021).</b><br/> TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.<br/> STEV: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.<br/> <b>CA Ontario Provincial (Canada, 6/2019).</b><br/> STEL: 10 mg/m<sup>3</sup>, (as Zr) 15 minutes.<br/> TWA: 5 mg/m<sup>3</sup>, (as Zr) 8 hours.<br/> <b>CA Alberta Provincial (Canada, 6/2018).</b><br/> 8 hrs OEL: 100 ppm 8 hours.<br/> 8 hrs OEL: 434 mg/m<sup>3</sup> 8 hours.<br/> 15 min OEL: 543 mg/m<sup>3</sup> 15 minutes.<br/> 15 min OEL: 125 ppm 15 minutes.<br/> <b>CA British Columbia Provincial (Canada, 6/2021).</b><br/> TWA: 20 ppm 8 hours.<br/> <b>CA Ontario Provincial (Canada, 6/2019).</b><br/> TWA: 20 ppm 8 hours.<br/> <b>CA Quebec Provincial (Canada, 6/2021).</b><br/> TWA: 20 ppm 8 hours.<br/> <b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br/> STEL: 125 ppm 15 minutes.<br/> TWA: 100 ppm 8 hours.</p> |
|--------------|----------|---|

### Occupational exposure limits (Mexico)

| Ingredient name             | CAS #      | Exposure limits  |
|-----------------------------|------------|--|
| Light Aliphatic Hydrocarbon | 64742-47-8 | <b>ACGIH TLV (United States, 1/2021).</b><br><b>Absorbed through skin.</b><br>TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours. |
| Methyl Isobutyl Ketone      | 108-10-1   | <b>NOM-010-STPS-2014 (Mexico, 4/2016).</b><br>TWA: 50 ppm 8 hours.<br>STEL: 75 ppm 15 minutes.   |
| Zirconium 2-Ethylhexanoate  | 22464-99-9 | <b>NOM-010-STPS-2014 (Mexico, 4/2016).</b><br>TWA: 5 mg/m <sup>3</sup> , (as Zr) 8 hours.<br>STEL: 10 mg/m <sup>3</sup> , (as Zr) 15 minutes.    |

### **Appropriate engineering controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### **Environmental exposure controls**

: **This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

## Section 8. Exposure controls/personal protection

|                               |  |
|-------------------------------|--|
| <b>Hygiene measures</b>       | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.   |
| <b>Eye/face protection</b>    | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.  |
| <b>Skin protection</b>        |  |
| <b>Hand protection</b>        | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| <b>Body protection</b>        | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.  |
| <b>Other skin protection</b>  | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  |
| <b>Respiratory protection</b> | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   |

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

|  |  |
|--|--|
| <b>Physical state</b>  | : Liquid.  |
| <b>Color</b>   | : Not available.   |
| <b>Odor</b>  | : Not available.   |
| <b>Odor threshold</b>  | : Not available.   |
| <b>pH</b>  | : Not applicable.  |
| <b>Melting point/freezing point</b>                            | : Not available.   |
| <b>Boiling point, initial boiling point, and boiling range</b> | : 148°C (298.4°F)  |
| <b>Flash point</b>   | : Closed cup: 39°C (102.2°F) [Pensky-Martens Closed Cup] |
| <b>Evaporation rate</b>  | : 0.13 (butyl acetate = 1)                               |
| <b>Flammability</b>  | : Not available.   |
| <b>Lower and upper explosion limit/flammability limit</b>      | : Lower: 1%<br>Upper: 6%                                 |
| <b>Vapor pressure</b>  | : 0.17 kPa (1.27 mm Hg)                                  |
| <b>Relative vapor density</b>                                  | : 5 [Air = 1]  |
| <b>Relative density</b>  | : 1.18   |

|                                       |  |                               |             |                  |      |       |
|---------------------------------------|--|-------------------------------|-------------|------------------|------|-------|
| <b>Date of issue/Date of revision</b> | : 6/18/2022  | <b>Date of previous issue</b> | : 4/14/2022 | <b>Version</b>   | : 22 | 10/19 |
| B54W151                               | PRO INDUSTRIAL™ Urethane Alkyd Enamel<br>Extra White |                               |             | SHW-85-NA-GHS-CA |      |       |

## Section 9. Physical and chemical properties

|   |   |
|---|---|
| <b>Solubility</b>                             | : Not available.                                    |
| <b>Partition coefficient: n-octanol/water</b> | : Not applicable.                                   |
| <b>Auto-ignition temperature</b>              | : Not available.                                    |
| <b>Decomposition temperature</b>              | : Not available.                                    |
| <b>Viscosity</b>                              | : Kinematic (40°C (104°F)): <20.5 mm²/s (<20.5 cSt) |
| <b>Molecular weight</b>                       | : Not applicable.                                   |
| <b>Aerosol product</b>                        |   |
| <b>Heat of combustion</b>                     | : 12.112 kJ/g                                       |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.   |
| <b>Chemical stability</b>                 | : The product is stable.   |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.  |
| <b>Conditions to avoid</b>                | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. |
| <b>Incompatible materials</b>             | : Reactive or incompatible with the following materials:<br>oxidizing materials  |
| <b>Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced.   |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                   | Result                | Species | Dose        | Exposure |
|---|-----------------------|---------|-------------|----------|
| Xylene, mixed isomers                     | LC50 Inhalation Gas.  | Rat     | 6700 ppm    | 4 hours  |
|   | LD50 Oral             | Rat     | 4300 mg/kg  | -        |
| Hydrotreated Heavy Petroleum Naphtha      | LC50 Inhalation Vapor | Rat     | 8500 mg/m³  | 4 hours  |
|   | LD50 Oral             | Rat     | >6 g/kg     | -        |
| Methyl Ethyl Ketoxime                     | LD50 Oral             | Rat     | 930 mg/kg   | -        |
| Methyl Isobutyl Ketone                    | LD50 Oral             | Rat     | 2080 mg/kg  | -        |
| Zirconium 2-Ethylhexanoate                | LD50 Dermal           | Rabbit  | >5 g/kg     | -        |
|   | LD50 Oral             | Rat     | >5 g/kg     | -        |
| Ethylbenzene                              | LD50 Dermal           | Rabbit  | >5000 mg/kg | -        |
|   | LD50 Oral             | Rat     | 3500 mg/kg  | -        |
| 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol | LD50 Oral             | Rat     | 14000 mg/kg | -        |

#### Irritation/Corrosion

## Section 11. Toxicological information

| Product/ingredient name     | Result                   | Species | Score | Exposure          | Observation |
|-----------------------------|--------------------------|---------|-------|-------------------|-------------|
| Titanium Dioxide            | Skin - Mild irritant     | Human   | -     | 72 hours 300 ug l | -           |
| Xylene, mixed isomers       | Eyes - Mild irritant     | Rabbit  | -     | 87 mg             | -           |
|                             | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 5 mg     | -           |
|                             | Skin - Mild irritant     | Rat     | -     | 8 hours 60 uL     | -           |
|                             | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 mg   | -           |
|                             | Skin - Moderate irritant | Rabbit  | -     | 100 %             | -           |
| Methyl Ethyl Ketoxime       | Eyes - Severe irritant   | Rabbit  | -     | 100 uL            | -           |
| Methyl Isobutyl Ketone      | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100 uL   | -           |
|                             | Eyes - Severe irritant   | Rabbit  | -     | 40 mg             | -           |
|                             | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500 mg   | -           |
| 2-(2-Methoxyethoxy)-ethanol | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 mg   | -           |
|                             | Eyes - Moderate irritant | Rabbit  | -     | 500 mg            | -           |
| Ethylbenzene                | Eyes - Severe irritant   | Rabbit  | -     | 500 mg            | -           |
|                             | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15 mg    | -           |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|-----|
| Titanium Dioxide        | -    | 2B   | -   |
| Xylene, mixed isomers   | -    | 3    | -   |
| Methyl Isobutyl Ketone  | -    | 2B   | -   |
| Ethylbenzene            | -    | 2B   | -   |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

| Name                                 | Category                 | Route of exposure | Target organs                                    |
|--------------------------------------|--------------------------|-------------------|--|
| Light Aliphatic Hydrocarbon          | Category 3               | -                 | Respiratory tract irritation                     |
| Xylene, mixed isomers                | Category 3<br>Category 3 | -                 | Narcotic effects<br>Respiratory tract irritation |
| Hydrotreated Heavy Petroleum Naphtha | Category 3               | -                 | Respiratory tract irritation                     |
| Methyl Ethyl Ketoxime                | Category 3<br>Category 1 | -                 | Narcotic effects<br>upper respiratory            |

## Section 11. Toxicological information

|                                    |                          |   |   |
|------------------------------------|--------------------------|---|---|
| Methyl Isobutyl Ketone             | Category 3<br>Category 3 | - | tract<br>Narcotic effects<br>Respiratory tract irritation |
| 2-(2-Methoxyethoxy)-ethanol        | Category 3<br>Category 3 | - | Narcotic effects<br>Respiratory tract irritation          |
| Ethylbenzene                       | Category 3<br>Category 3 | - | Narcotic effects<br>Respiratory tract irritation          |
| Med. Aliphatic Hydrocarbon Solvent | Category 3<br>Category 3 | - | Narcotic effects<br>Respiratory tract irritation          |
|                                    | Category 3               |   | Narcotic effects  |

### Specific target organ toxicity (repeated exposure)

| Name                                 | Category   | Route of exposure | Target organs |
|--------------------------------------|------------|-------------------|---------------|
| Light Aliphatic Hydrocarbon          | Category 2 | -                 | -             |
| Xylene, mixed isomers                | Category 2 | -                 | -             |
| Hydrotreated Heavy Petroleum Naphtha | Category 2 | -                 | -             |
| Methyl Ethyl Ketoxime                | Category 2 | -                 | blood system  |
| Methyl Isobutyl Ketone               | Category 2 | -                 | -             |
| 2-(2-Methoxyethoxy)-ethanol          | Category 2 | -                 | -             |
| Ethylbenzene                         | Category 2 | -                 | -             |
| Med. Aliphatic Hydrocarbon Solvent   | Category 1 | -                 | -             |

### Aspiration hazard

| Name                                 | Result                         |
|--------------------------------------|--------------------------------|
| Light Aliphatic Hydrocarbon          | ASPIRATION HAZARD - Category 1 |
| Xylene, mixed isomers                | ASPIRATION HAZARD - Category 1 |
| Hydrotreated Heavy Petroleum Naphtha | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene                         | ASPIRATION HAZARD - Category 1 |
| Med. Aliphatic Hydrocarbon Solvent   | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

**Skin contact** : May cause an allergic skin reaction.

**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo

## Section 11. Toxicological information

unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : Suspected of damaging the unborn child.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : Suspected of damaging fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name                   | Result                                | Species                             | Exposure |
|---|---------------------------------------|-------------------------------------|----------|
| Light Aliphatic Hydrocarbon               | Acute LC50 2200 µg/l Fresh water      | Fish - Lepomis macrochirus          | 4 days   |
| Titanium Dioxide                          | Acute LC50 >1000000 µg/l Marine water | Fish - Fundulus heteroclitus        | 96 hours |
| Xylene, mixed isomers                     | Acute LC50 8500 µg/l Marine water     | Crustaceans - Palaemonetes pugio    | 48 hours |
| Methyl Ethyl Ketoxime                     | Acute LC50 13400 µg/l Fresh water     | Fish - Pimephales promelas          | 96 hours |
| Methyl Isobutyl Ketone                    | Acute LC50 843000 µg/l Fresh water    | Fish - Pimephales promelas          | 96 hours |
|   | Acute LC50 505000 µg/l Fresh water    | Fish - Pimephales promelas          | 96 hours |
|   | Chronic NOEC 78 mg/l Fresh water      | Daphnia - Daphnia magna             | 21 days  |
|   | Chronic NOEC 168 mg/l Fresh water     | Fish - Pimephales promelas - Embryo | 33 days  |
| 2-(2-Methoxyethoxy)-ethanol               | Acute EC50 >930 ppm Fresh water       | Daphnia - Daphnia magna             | 48 hours |
| Ethylbenzene                              | Acute LC50 7500000 µg/l Fresh water   | Fish - Lepomis macrochirus          | 96 hours |
|   | Acute EC50 4900 µg/l Marine water     | Algae - Skeletonema costatum        | 72 hours |
|   | Acute EC50 7700 µg/l Marine water     | Algae - Skeletonema costatum        | 96 hours |
|   | Acute EC50 6.53 mg/l Marine water     | Crustaceans - Artemia sp. - Nauplii | 48 hours |
|   | Acute EC50 2.93 mg/l Fresh water      | Daphnia - Daphnia magna - Neonate   | 48 hours |
| 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol | Acute LC50 4200 µg/l Fresh water      | Fish - Oncorhynchus mykiss          | 96 hours |
|   | Acute EC50 13000000 µg/l Fresh water  | Daphnia - Daphnia magna             | 48 hours |
|   | Acute LC50 14400000 µg/l Marine water | Fish - Cyprinodon variegatus        | 96 hours |

### Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Xylene, mixed isomers   | -                 | -          | Readily          |
| Methyl Isobutyl Ketone  | -                 | -          | Readily          |
| Ethylbenzene            | -                 | -          | Readily          |

### Bioaccumulative potential

| Product/ingredient name                   | LogP <sub>ow</sub> | BCF         | Potential |
|---|--------------------|-------------|-----------|
| Xylene, mixed isomers                     | -                  | 8.1 to 25.9 | low       |
| Hydrotreated Heavy Petroleum Naphtha      | -                  | 10 to 2500  | high      |
| Methyl Ethyl Ketoxime                     | -                  | 2.5 to 5.8  | low       |
| Calcium 2-Ethylhexanoate                  | -                  | 2.96        | low       |
| Zirconium 2-Ethylhexanoate                | -                  | 2.96        | low       |
| 2-Ethyl-2-(hydroxymethyl)-1,3-propanediol | -                  | <1          | low       |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.






## Section 13. Disposal considerations

### Disposal methods

: This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                            | DOT<br>Classification  | TDG<br>Classification   | Mexico<br>Classification   | IATA   | IMDG   |
|----------------------------|--|---|--|--|--|
| UN number                  | UN1263   | UN1263  | UN1263   | UN1263   | UN1263   |
| UN proper shipping name    | PAINT  | PAINT   | PAINT  | PAINT  | PAINT  |
| Transport hazard class(es) | 3<br>   | 3<br>                                    | 3<br> | 3<br> | 3<br> |
| Packing group              | III  | III   | III  | III  | III  |
| Environmental hazards      | No.  | No.   | No.  | No.  | No.  |
| Additional information     | This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). | -  | -  | <b>Emergency schedules</b> F-E, S-E  |

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: 4/14/2022

Version : 22

16/19

B54W151

PRO INDUSTRIAL™ Urethane Alkyd Enamel  
Extra White

SHW-85-NA-GHS-CA

## Section 14. Transport information

|  |                                    |                       |                       |  |  |
|--|------------------------------------|-----------------------|-----------------------|--|--|
|  | quantity.<br><b>ERG No.</b><br>128 | <b>ERG No.</b><br>128 | <b>ERG No.</b><br>128 |  |  |
|--|------------------------------------|-----------------------|-----------------------|--|--|

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments :** Not available.

**Proper shipping name :** Not available.

## Section 15. Regulatory information

This product contains a component that is either subject to a CEPA ministerial condition or an existing/proposed SNAC (Significant New Activity). See Environmental Data Sheet (EDS) for additional detail.

### International regulations

#### **International lists**

**: Australia inventory (AII):** Not determined.  
**China inventory (IECSC):** Not determined.  
**Japan inventory (CSCL):** Not determined.  
**Japan inventory (ISHL):** Not determined.  
**Korea inventory (KECI):** Not determined.  
**New Zealand Inventory of Chemicals (NZIoC):** Not determined.  
**Philippines inventory (PICCS):** Not determined.  
**Taiwan Chemical Substances Inventory (TCSI):** Not determined.  
**Thailand inventory:** Not determined.  
**Turkey inventory:** Not determined.  
**Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 3 |
| Flammability     |   | 2 |
| Physical hazards |   | 0 |
|                  |   |   |

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

## Section 16. Other information

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

| Classification   | Justification         |
|--|-----------------------|
| FLAMMABLE LIQUIDS - Category 3   | On basis of test data |
| SKIN SENSITIZATION - Category 1  | Calculation method    |
| CARCINOGENICITY - Category 2   | Calculation method    |
| TOXIC TO REPRODUCTION - Category 2   | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3             | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2                              | Calculation method    |
| ASPIRATION HAZARD - Category 1   | Calculation method    |

### History

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**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

|   |  |                     |       |
|---|--|---------------------|-------|
| <b>Date of issue/Date of revision</b> : 6/18/2022 | <b>Date of previous issue</b> : 4/14/2022            | <b>Version</b> : 22 | 18/19 |
| B54W151   | PRO INDUSTRIAL™ Urethane Alkyd Enamel<br>Extra White | SHW-85-NA-GHS-CA    |       |



# SAFETY DATA SHEET

A82W153

## Section 1. Identification

**Product name** : A-100® Exterior Acrylic Latex Satin  
Deep Base

**Product code** : A82W153

**Other means of identification** : Not available.

**Product type** : Liquid.

**Relevant identified uses of the substance or mixture and uses advised against**  
Not applicable.

**Manufacturer** : THE SHERWIN-WILLIAMS COMPANY  
101 Prospect Avenue N.W.  
Cleveland, OH 44115

**Emergency telephone number of the company** : (216) 566-2917

**Product Information Telephone Number** : Not available.

**Regulatory Information Telephone Number** : (216) 566-2902

**Transportation Emergency Telephone Number** : (800) 424-9300

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : CARCINOGENICITY - Category 1A

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 17.3%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : May cause cancer.

### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response** : IF exposed or concerned: Get medical attention.

**Storage** : Store locked up.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

## Section 2. Hazards identification

### Supplemental label elements

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.

### Hazards not otherwise classified

: None known.

## Section 3. Composition/information on ingredients

### Substance/mixture

: Mixture

### Other means of identification

: Not available.

### CAS number/other identifiers

| Ingredient name  | % by weight | CAS number |
|------------------|-------------|------------|
| Titanium Dioxide | 4.6         | 13463-67-7 |
| zinc oxide       | 2.0         | 1314-13-2  |
| Cristobalite     | 0.1         | 14464-46-1 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

#### Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

#### Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

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2/11

## Section 4. First aid measures

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
metal oxide/oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

| Ingredient name  | Exposure limits  |
|------------------|--|
| Titanium Dioxide | <b>ACGIH TLV (United States, 4/2014).</b><br>TWA: 10 mg/m <sup>3</sup> 8 hours.  |
| zinc oxide       | <b>OSHA PEL (United States, 2/2013).</b><br>TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust<br><b>NIOSH REL (United States, 10/2013).</b><br>CEIL: 15 mg/m <sup>3</sup> Form: Dust<br>TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Dust and fumes<br>STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Fume<br><b>OSHA PEL (United States, 2/2013).</b> |

## Section 8. Exposure controls/personal protection

Cristobalite

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Fume  
TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  
TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust  
**ACGIH TLV (United States, 4/2014).**  
TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  
STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable fraction  
**OSHA PEL Z3 (United States, 2/2013).**  
TWA: 250 MPPCF / 2 x (%SiO<sub>2</sub>+5) 8 hours. Form: Respirable  
TWA: 10 MG/M3 / 2 x (%SiO<sub>2</sub>+2) 8 hours. Form: Respirable  
TWA: 30 MG/M3 / 2 x (%SiO<sub>2</sub>+2) 8 hours. Form: Total dust

### Appropriate engineering controls

- : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

##### Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

##### Body protection

- : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Other skin protection

- : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

##### Respiratory protection

- : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

|  |  |
|--|--|
| Physical state                               | : Liquid.  |
| Color  | : Not available.   |
| Odor   | : Not available.   |
| Odor threshold                               | : Not available.   |
| pH   | : 9.2  |
| Melting point                                | : Not available.   |
| Boiling point                                | : 100°C (212°F)  |
| Flash point                                  | : Closed cup: >93.3°C (>199.9°F)   |
| Evaporation rate                             | : 0.09 (butyl acetate = 1)   |
| Flammability (solid, gas)                    | : Not available.   |
| Lower and upper explosive (flammable) limits | : Not available.   |
| Vapor pressure                               | : 0.31 kPa (2.333 mm Hg) [at 20°C]   |
| Vapor density                                | : 1 [Air = 1]  |
| Relative density                             | : 1.18   |
| Solubility                                   | : Not available.   |
| Partition coefficient: n-octanol/water       | : Not available.   |
| Auto-ignition temperature                    | : Not available.   |
| Decomposition temperature                    | : Not available.   |
| Viscosity                                    | : Kinematic (room temperature): >0.205 cm <sup>2</sup> /s (>20.5 cSt)<br>Kinematic (40°C (104°F)): >0.205 cm <sup>2</sup> /s (>20.5 cSt) |

### Aerosol product

|                    |                   |
|--------------------|-------------------|
| Heat of combustion | : 0.00000163 kJ/g |
|--------------------|-------------------|

## Section 10. Stability and reactivity

|                                    |  |
|------------------------------------|--|
| Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| Chemical stability                 | : The product is stable.   |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| Conditions to avoid                | : No specific data.  |
| Incompatible materials             | : No specific data.  |
| Hazardous decomposition products   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

## Section 11. Toxicological information

| Product/ingredient name | Result               | Species | Score | Exposure                             | Observation |
|-------------------------|----------------------|---------|-------|--------------------------------------|-------------|
| Titanium Dioxide        | Skin - Mild irritant | Human   | -     | 72 hours 300 Micrograms              | -           |
| zinc oxide              | Eyes - Mild irritant | Rabbit  | -     | Intermittent 24 hours 500 milligrams | -           |
|                         | Skin - Mild irritant | Rabbit  | -     | 24 hours 500 milligrams              | -           |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP                             |
|-------------------------|------|------|---------------------------------|
| Titanium Dioxide        | -    | 2B   | -                               |
| Cristobalite            | -    | 1    | Known to be a human carcinogen. |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

| Product/ingredient name        | Result                                | Species  | Exposure |
|--------------------------------|---------------------------------------|--|----------|
| Titanium Dioxide<br>zinc oxide | Acute LC50 >1000000 µg/l Marine water | Fish - Fundulus heteroclitus                                       | 96 hours |
|                                | Acute IC50 1.85 mg/l Marine water     | Algae - Skeletonema costatum                                       | 96 hours |
|                                | Acute IC50 46 µg/l Fresh water        | Algae - Pseudokirchneriella subcapitata - Exponential growth phase | 72 hours |
|                                | Acute LC50 98 µg/l Fresh water        | Daphnia - Daphnia magna - Neonate                                  | 48 hours |
|                                | Acute LC50 1.1 ppm Fresh water        | Fish - Oncorhynchus mykiss   | 96 hours |

### Persistence and degradability

Not available.

### Bioaccumulative potential

| Product/ingredient name        | LogP <sub>ow</sub> | BCF   | Potential |
|--------------------------------|--------------------|-------|-----------|
| Titanium Dioxide<br>zinc oxide | -                  | 352   | low       |
|                                | -                  | 60960 | high      |

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                                   | <b>DOT<br/>Classification</b>               | <b>TDG<br/>Classification</b>               | <b>Mexico<br/>Classification</b>            | <b>IATA</b>                                 | <b>IMDG</b>  |
|-----------------------------------|---|---|---|---|--|
| <b>UN number</b>                  | Not regulated.                              | Not regulated.                              | Not regulated.                              | Not regulated.                              | Not regulated.                                     |
| <b>UN proper shipping name</b>    | -   | -   | -   | -   | -  |
| <b>Transport hazard class(es)</b> | -   | -   | -   | -   | -  |
| <b>Packing group</b>              | -   | -   | -   | -   | -  |
| <b>Environmental hazards</b>      | No.   | No.   | No.   | No.   | No.  |
| <b>Additional information</b>     | <u>Special provisions</u><br>Not Applicable | <u>Special provisions</u><br>Not Applicable | <u>Special provisions</u><br>Not Applicable | <u>Special provisions</u><br>Not Applicable | <u>Emergency schedules (EmS)</u><br>Not Applicable |

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** :

## State regulations

### California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

|                  |   |   |
|------------------|---|---|
| Health           | * | 1 |
| Flammability     |   | 0 |
| Physical hazards |   | 0 |
|                  |   |   |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.





# SAFETY DATA SHEET

## 1. Identification

**Product identifier** ULTRA-CRETE MULTIPURPOSE THIN-SET MORTAR  
**Other means of identification** None.  
**Recommended use** Cement is used as a binder in concrete and mortars that are widely used in construction.  
**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Supplier

**Company name** Southern Grouts and Mortars, Inc.  
**Address** 1502 SW 2nd Place  
Pompano Beach, Florida 33069  
**Telephone number** (954) 943-2288  
**Fax** (954) 943-2402  
**Contact name** Technical Manager  
**Website** WWW.SGM.CC  
**Emergency telephone number** (954) 943-2288

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

|   |   |
|---|---|
| Skin corrosion/irritation                         | Category 2                              |
| Serious eye damage/eye irritation                 | Category 1                              |
| Sensitization, skin                               | Category 1                              |
| Carcinogenicity                                   | Category 1A                             |
| Specific target organ toxicity, single exposure   | Category 3 respiratory tract irritation |
| Specific target organ toxicity, repeated exposure | Category 2 (Lung)                       |

**OSHA defined hazards** Not classified.

#### Label elements



**Signal word** Danger

**Hazard statement** Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. May cause damage to organs (Lung) through prolonged or repeated exposure.

#### Precautionary statement

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

**Response** If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

|  |  |
|--|--|
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.  |
| <b>Supplemental information</b>                  | Product becomes alkaline when exposed to moisture. |

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name   | CAS number | %     |
|-----------------|------------|-------|
| Quartz          | 14808-60-7 | 30-75 |
| Portland Cement | 65997-15-1 | 15-40 |

|                             |  |
|-----------------------------|--|
| <b>Composition comments</b> | All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. |
|-----------------------------|--|

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Inhalation of wet product not foreseeable route of exposure. If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.  |
| <b>Skin contact</b>   | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.   |
| <b>Eye contact</b>  | Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.  |
| <b>Ingestion</b>  | Never give anything by mouth to a victim who is unconscious or is having convulsions. DO NOT INDUCE VOMITING. Rinse mouth thoroughly with water and give large amounts of water, if person is conscious. Get medical attention.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.  |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ). Use fire-extinguishing media appropriate for surrounding fire. |
| <b>Unsuitable extinguishing media</b>                                | None known.   |
| <b>Specific hazards arising from the chemical</b>                    | During fire, hazardous combustion products are released that may include: Carbon oxides (CO <sub>x</sub> ).                             |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.   |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.   |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.  |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.   |

### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. |
|--|--|

**Methods and materials for containment and cleaning up**

Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Prevent entry into waterways, sewer, basements or confined areas. For a dry material spill, use a HEPA (high efficiency particle air) vacuum to collect material and place in a sealable container for disposal. Avoid dust formation. For a wet spill, absorb or cover with dry earth, sand or other non-combustible material and transfer to containers for disposal. Neutralize the spill area. Use materials that can withstand the potentially corrosive nature of this product. Do not get water inside containers. Use materials that can withstand the potentially corrosive nature of this product. Do not get water inside containers. Following product recovery, flush area with water.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.

**7. Handling and storage****Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Static electricity and formation of sparks must be prevented. Do not breathe dust. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components                       | Type | Value    | Form                 |
|----------------------------------|------|----------|----------------------|
| Portland Cement (CAS 65997-15-1) | PEL  | 5 mg/m3  | Respirable fraction. |
|                                  |      | 15 mg/m3 | Total dust.          |

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

| Components                       | Type | Value     | Form        |
|----------------------------------|------|-----------|-------------|
| Portland Cement (CAS 65997-15-1) | TWA  | 50 mppcf  |             |
| Quartz (CAS 14808-60-7)          | TWA  | 0.3 mg/m3 | Total dust. |
|                                  |      | 0.1 mg/m3 | Respirable. |
|                                  |      | 2.4 mppcf | Respirable. |

**US. ACGIH Threshold Limit Values**

| Components                       | Type | Value       | Form                 |
|----------------------------------|------|-------------|----------------------|
| Portland Cement (CAS 65997-15-1) | TWA  | 1 mg/m3     | Respirable fraction. |
| Quartz (CAS 14808-60-7)          | TWA  | 0.025 mg/m3 | Respirable fraction. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                       | Type | Value      | Form             |
|----------------------------------|------|------------|------------------|
| Portland Cement (CAS 65997-15-1) | TWA  | 5 mg/m3    | Respirable.      |
|                                  |      | 10 mg/m3   | Total            |
| Quartz (CAS 14808-60-7)          | TWA  | 0.05 mg/m3 | Respirable dust. |

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

**Appropriate engineering controls**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

## Individual protection measures, such as personal protective equipment

|                                       |  |
|---------------------------------------|--|
| <b>Eye/face protection</b>            | In situations where there is potential splash or puff exposure of cement products, wear safety glasses with side shields or goggles. In extremely dusty or unpredictable environments wear unvented or indirectly vented goggles. Contact lenses should not be worn when working with cement or cement products.   |
| <b>Skin protection</b>                |  |
| <b>Hand protection</b>                | Wear protective gloves.  |
| <b>Skin protection</b>                |  |
| <b>Other</b>                          | Prevention is essential to avoiding potentially severe skin injury. Avoid contact with unhardened wet Portland cement products. If contact occurs, promptly wash affected area with soap and water. Where prolonged exposure to unhardened Portland cement products might occur, wear impervious clothing and gloves to prevent skin contact. Wear sturdy boots that are impervious to water and eliminate foot and ankle exposure. Do not rely on barrier crèmes; barrier crèmes should not be used in place of gloves. |
| <b>Respiratory protection</b>         | Avoid tasks which cause dust to become airborne. Use local or general ventilation to control exposure below applicable exposure limits. Use NIOSH/MSHA approved (30 CFR 11) or NIOSH approved (42 CFR 84) respirators in poorly ventilated areas, or if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation.  |
| <b>Thermal hazards</b>                | Not available.   |
| <b>General hygiene considerations</b> | Periodically wash affected areas contacted by dry or wet cement products with a pH neutral soap. When using, do not eat, drink, or smoke. Wash again at the end of work. If clothing becomes saturated with wet cement products, it should be removed and replaced with clean dry clothing.  |

## 9. Physical and chemical properties

### Appearance

|  |                                 |
|--|---------------------------------|
| <b>Physical state</b>                          | Solid.                          |
| <b>Form</b>                                    | Powder. Coarse Textured Powder. |
| <b>Color</b>                                   | Gray/white.                     |
| <b>Odor</b>                                    | Odorless.                       |
| <b>Odor threshold</b>                          | Not available.                  |
| <b>pH</b>                                      | Not available.                  |
| <b>Melting point/freezing point</b>            | Not available.                  |
| <b>Initial boiling point and boiling range</b> | Not available.                  |
| <b>Flash point</b>                             | Not available.                  |
| <b>Evaporation rate</b>                        | Not available.                  |
| <b>Flammability (solid, gas)</b>               | Not available.                  |

### Upper/lower flammability or explosive limits

|  |                |
|--|----------------|
| <b>Flammability limit - lower (%)</b>          | Not available. |
| <b>Flammability limit - upper (%)</b>          | Not available. |
| <b>Explosive limit - lower (%)</b>             | Not available. |
| <b>Explosive limit - upper (%)</b>             | Not available. |
| <b>Vapor pressure</b>                          | Not available. |
| <b>Vapor density</b>                           | Not available. |
| <b>Relative density</b>                        | 2.5            |
| <b>Solubility(ies)</b>                         |                |
| <b>Solubility (water)</b>                      | Miscible.      |
| <b>Partition coefficient (n-octanol/water)</b> | Not available. |
| <b>Auto-ignition temperature</b>               | Not available. |
| <b>Decomposition temperature</b>               | Not available. |
| <b>Viscosity</b>                               | Not available. |

## Other information

|                             |                |
|-----------------------------|----------------|
| <b>Explosive properties</b> | Not explosive. |
| <b>Oxidizing properties</b> | Not oxidizing. |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity Chemical stability Possibility of hazardous reactions</b> | The product is stable and non-reactive under normal conditions of use, storage and transport.<br>Material is stable under normal conditions.<br>No dangerous reaction known under conditions of normal use. |
| <b>Conditions to avoid</b>  | Contact with incompatible materials. Moisture.  |
| <b>Incompatible materials</b>   | Powerful oxidizers. Chlorine. Mineral acid.   |
| <b>Hazardous decomposition products</b>                                 | No hazardous decomposition products are known.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Dust may irritate respiratory system. Contact with moist mucous membranes of the respiratory system can cause a caustic condition resulting in burns. May cause damage to organs through prolonged or repeated exposure by inhalation. |
| <b>Skin contact</b> | Causes skin irritation. May cause an allergic skin reaction. Prolonged contact with wet cement/mixture may cause burns.  |
| <b>Eye contact</b>  | Causes serious eye damage. Prolonged contact with wet cement/mixture may cause burns.  |
| <b>Ingestion</b>    | Irritating. May cause nausea, stomach pain and vomiting. Expected to be a low ingestion hazard.  |

|   |   |
|---|---|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Shortness of breath. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. |
|---|---|

### Information on toxicological effects

|  |   |
|--|---|
| <b>Acute toxicity</b>                    | May cause respiratory irritation. May cause an allergic skin reaction.  |
| <b>Skin corrosion/irritation</b>         | Causes skin irritation.   |
| <b>Serious eye damage/eye irritation</b> | Causes serious eye damage.  |
| <b>Respiratory or skin sensitization</b> |   |
| <b>Respiratory sensitization</b>         | Not a respiratory sensitizer.   |
| <b>Skin sensitization</b>                | May cause an allergic skin reaction.  |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  |
| <b>Carcinogenicity</b>                   | May cause cancer by inhalation. This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Crystalline silica (inhaled in the form of cristobalite or quartz) has been classified by IARC, NTP and ACGIH as a known human carcinogen and suspected human carcinogen respectively. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. May cause delayed lung injury. |

### IARC Monographs. Overall Evaluation of Carcinogenicity

|                         |                           |
|-------------------------|---------------------------|
| Quartz (CAS 14808-60-7) | 1 Carcinogenic to humans. |
|-------------------------|---------------------------|

### NTP Report on Carcinogens

|                         |                               |
|-------------------------|-------------------------------|
| Quartz (CAS 14808-60-7) | Known To Be Human Carcinogen. |
|-------------------------|-------------------------------|

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects. |
| <b>Specific target organ toxicity - single exposure</b>   | May cause respiratory irritation.  |
| <b>Specific target organ toxicity - repeated exposure</b> | May cause damage to organs (Lung) through prolonged or repeated exposure.    |

|                          |   |
|--------------------------|---|
| <b>Aspiration hazard</b> | Not an aspiration hazard.   |
| <b>Chronic effects</b>   | May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. |

## 12. Ecological information

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | No data is available on the degradability of this product.   |
| <b>Bioaccumulative potential</b>     | No data available.   |
| <b>Mobility in soil</b>              | No data available.   |
| <b>Other adverse effects</b>         | None known.  |

## 13. Disposal considerations

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.                         |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |

## 14. Transport information

|   |                                   |
|---|-----------------------------------|
| <b>DOT</b>  | Not regulated as dangerous goods. |
| <b>IATA</b>   | Not regulated as dangerous goods. |
| <b>IMDG</b>   | Not regulated as dangerous goods. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.                   |

## 15. Regulatory information

|   |  |
|---|--|
| <b>US federal regulations</b>   | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.       |
| <b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>  | Not regulated.   |
| <b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b> | Not regulated.   |
| <b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>                 | Not listed.  |
| <b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>    |  |
| <b>Hazard categories</b>  | Immediate Hazard - Yes<br>Delayed Hazard - Yes<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |
| <b>SARA 302 Extremely hazardous substance</b>                         | Not listed.  |
| <b>SARA 311/312 Hazardous chemical</b>                                | Yes  |
| <b>SARA 313 (TRI reporting)</b>                                       | Not regulated.   |

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

### Safe Drinking Water Act (SDWA)

Not regulated.

## US state regulations

### US. Massachusetts RTK - Substance List

Portland Cement (CAS 65997-15-1)

Quartz (CAS 14808-60-7)

### US. New Jersey Worker and Community Right-to-Know Act

Portland Cement (CAS 65997-15-1)

Quartz (CAS 14808-60-7)

### US. Pennsylvania Worker and Community Right-to-Know Law

Portland Cement (CAS 65997-15-1)

Quartz (CAS 14808-60-7)

### US. Rhode Island RTK

Not regulated.

### US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Quartz (CAS 14808-60-7)

## International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

|               |   |
|---------------|---|
| Issue date    | 23-May-2016   |
| Revision date | -   |
| Version #     | 01  |
| HMIS® ratings | Health: 3*<br>Flammability: 0<br>Physical hazard: 0 |

## NFPA ratings



**Disclaimer**

Southern Grouts and Mortars cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP PLUS E 20GL

Material number : 000000000000058850

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : 404-352-1680

**Emergency telephone numbers****For SDS Information** : Compliance Services 1-877-428-9937**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded**For a Transportation Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616**Recommended use of the chemical and restrictions on use**

Recommended use : Cleaner

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

|            |              |
|------------|--------------|
| Appearance | liquid       |
| Colour     | clear, green |
| Odour      | pleasant     |

**GHS Classification**Skin irritation : Category 2  
Eye irritation : Category 2A  
Carcinogenicity : Category 2**GHS label elements**

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H351 Suspected of causing cancer.Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.

## ZEP PLUS E 20GL

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

**Disposal:**

P501 Dispose of contents/container in accordance with local regulation.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Hazardous components**

| Chemical name  | CAS-No.    | Concentration [%] |
|--|------------|-------------------|
| Amides, coco, N,N-bis(hydroxyethyl)  | 68603-42-9 | >= 1 - < 5        |
| Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts        | 68439-57-6 | >= 1 - < 5        |
| dodecylbenzenesulphonic acid, compound with 2,2',2''-nitrilotriethanol (1:1) | 27323-41-7 | >= 1 - < 5        |
| sodium dodecylbenzenesulfonate   | 25155-30-0 | >= 1 - < 5        |
| 2,2'-iminodiethanol  | 111-42-2   | >= 0.1 - < 1      |

The exact percentages of disclosed substances are withheld as trade secrets.

## SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.  
Get medical attention immediately.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.  
Wash contaminated clothing before re-use.  
Remove contaminated clothing and shoes.
- In case of eye contact : Continue rinsing eyes during transport to hospital.  
Remove contact lenses.

## ZEP PLUS E 20GL

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

|   |   |
|---|---|
|   | <p>Protect unharmed eye.</p> <p>Keep eye wide open while rinsing.</p> <p>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.</p> <p>If eye irritation persists, consult a specialist.</p>  |
| If swallowed  | <p>: Keep respiratory tract clear.</p> <p>DO NOT induce vomiting unless directed to do so by a physician or poison control center.</p> <p>Never give anything by mouth to an unconscious person.</p> <p>If symptoms persist, call a physician.</p> <p>Take victim immediately to hospital.</p>  |
| Most important symptoms and effects, both acute and delayed | <p>: Effects are immediate and delayed.</p> <p>Symptoms may include irritation, redness, pain, and rash.</p> <p>Chronic effects are delayed and symptoms may not be observed during an exposure.</p> <p>Effects are dependent on exposure (dose, concentration, contact time).</p> <p>Suspected of causing cancer.</p> <p>Causes serious eye irritation.</p> <p>Review section 2 of SDS to see all potential hazards.</p> |
| Notes to physician  | <p>: Treat symptomatically. Symptoms may be delayed.</p>  |

## SECTION 5. FIREFIGHTING MEASURES

|   |   |
|---|---|
| Suitable extinguishing media                  | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |
| Unsuitable extinguishing media                | : High volume water jet   |
| Specific hazards during firefighting          | : Do not allow run-off from fire fighting to enter drains or water courses.   |
| Hazardous combustion products                 | <p>: Carbon dioxide (CO<sub>2</sub>)</p> <p>Carbon monoxide</p> <p>Nitrogen oxides (NO<sub>x</sub>)</p> <p>Smoke</p> <p>Hazardous combustion products</p> <p>Sulphur oxides</p> |
| Specific extinguishing methods                | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.   |
| Further information                           | <p>: Standard procedure for chemical fires.</p> <p>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p>                  |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary.  |

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : Do not breathe vapours or spray mist.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Observe label precautions.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

| Components          | CAS-No.  | Value type<br>(Form of exposure)      | Control parameters /<br>Permissible concentration | Basis     |
|---------------------|----------|---------------------------------------|---|-----------|
| 2,2'-iminodiethanol | 111-42-2 | TWA<br>(Inhalable fraction and vapor) | 1 mg/m <sup>3</sup>                               | ACGIH     |
|                     |          | TWA                                   | 3 ppm<br>15 mg/m <sup>3</sup>                     | NIOSH REL |
|                     |          | TWA                                   | 3 ppm<br>15 mg/m <sup>3</sup>                     | OSHA P0   |
|                     |          | PEL                                   | 0.46 ppm<br>2 mg/m <sup>3</sup>                   | CAL PEL   |

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

**Engineering measures** : effective ventilation in all processing areas

**Personal protective equipment**

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Material

Remarks

: Protective gloves

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Tightly fitting safety goggles

Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water.

Skin and body protection

: Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

: When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : clear, green

Odour : pleasant

Odour Threshold : No data available

pH : 8.35

Melting point/freezing point : Not applicable

Boiling point : 104.44 °C

Flash point :  
No data available

Evaporation rate : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : not determined  
No data available

Relative vapour density : No data available

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

|  |                                    |
|--|------------------------------------|
| Density                                | : 1.016 g/cm <sup>3</sup>          |
| Solubility(ies)                        |                                    |
| Water solubility                       | : soluble                          |
| Solubility in other solvents           | : Not applicable                   |
| Partition coefficient: n-octanol/water | : No data available                |
| Auto-ignition temperature              | : not determined                   |
| Thermal decomposition                  | : No data available                |
| Viscosity                              |                                    |
| Viscosity, kinematic                   | : 155.3 mm <sup>2</sup> /s (20 °C) |

**SECTION 10. STABILITY AND REACTIVITY**

|                                    |   |
|------------------------------------|---|
| Reactivity                         | : Stable  |
| Chemical stability                 | : Stable under normal conditions.                     |
| Possibility of hazardous reactions | : No decomposition if stored and applied as directed. |
| Conditions to avoid                | : No data available                                   |
| Incompatible materials             | : Acids<br>Oxidizing agents                           |
| Hazardous decomposition products   | : No hazardous decomposition products are known.      |

**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

|                              |   |
|------------------------------|---|
| Aggravated Medical Condition | : None known.   |
| Symptoms of Overexposure     | : Effects are immediate and delayed.<br>Symptoms may include irritation, redness, pain, and rash.<br>Chronic effects are delayed and symptoms may not be observed during an exposure.<br>Effects are dependent on exposure (dose, concentration, contact time). |

**Carcinogenicity:****IARC**

Group 2B: Possibly carcinogenic to humans  
Amides, coco, N,N-

68603-42-9

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

|              |   |          |
|--------------|---|----------|
| <b>ACGIH</b> | bis(hydroxyethyl)<br>2,2'-iminodiethanol  | 111-42-2 |
|              | Confirmed animal carcinogen with unknown relevance to humans  |          |
|              | 2,2'-iminodiethanol   | 111-42-2 |
| <b>OSHA</b>  | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.                |          |
| <b>NTP</b>   | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |          |

**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

**Components:****sodium dodecylbenzenesulfonate:**

Acute oral toxicity : LD50 Oral Rat: 438 mg/kg

**Skin corrosion/irritation****Product:**

Remarks: Irritating to skin.

**Serious eye damage/eye irritation****Product:**

Remarks: Severe eye irritation

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

**Further information****Product:**

Remarks: No data available

**Components:****Amides, coco, N,N-bis(hydroxyethyl):**

Remarks: No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

**Components:****Amides, coco, N,N-bis(hydroxyethyl) :**

Partition coefficient: n-octanol/water : Remarks: No data available

**2,2'-iminodiethanol :**

Partition coefficient: n-octanol/water : Pow: 1.43

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

**Components:****Amides, coco, N,N-bis(hydroxyethyl) :**

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

Additional ecological  
information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with  
chemical or used container.  
Dispose of in accordance with local regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

Transportation Regulation: 49 CFR (USA):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

**SECTION 15. REGULATORY INFORMATION**

**TSCA list** : No substances are subject to a Significant New Use Rule.

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

| Components          | CAS-No.  | Component RQ<br>(lbs) | Calculated product RQ<br>(lbs) |
|---------------------|----------|-----------------------|--------------------------------|
| 2,2'-iminodiethanol | 111-42-2 | 100                   | *                              |

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Skin corrosion or irritation  
Serious eye damage or eye irritation  
Carcinogenicity

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop. 65**

WARNING: This product can expose you to chemicals including Amides, coco, N,N-bis(hydroxyethyl), 2,2'-iminodiethanol, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**The components of this product are reported in the following inventories:**

**DSL** This product contains one or more components that are listed on the Canadian NDSL. All other components are on the Canadian DSL.  
**TSCA** On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

TSCA (USA), DSL (Canada), NDSL (Canada)

**SECTION 16. OTHER INFORMATION**

# SAFETY DATA SHEET



## ZEP PLUS E 20GL

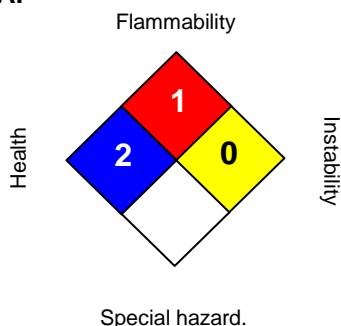
Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020

### Further information

#### NFPA:



#### HMIS III:

|                 |    |
|-----------------|----|
| HEALTH          | 2* |
| FLAMMABILITY    | 1  |
| PHYSICAL HAZARD | 0  |

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

### OSHA - GHS Label Information:

Hazard pictograms



Signal word

Hazard statements

Precautionary statements

**Warning:**  
Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer.

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:** IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/ attention. If skin irritation occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

**Disposal:** Dispose of contents/container in accordance with local regulation.

|                |            |
|----------------|------------|
| Version:       | 3.1        |
| Revision Date: | 02/14/2018 |
| Print Date:    | 11/03/2020 |

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

**ZEP PLUS E 20GL**

Version 3.1

Revision Date 02/14/2018

Print Date 11/03/2020