MATERIAL SAFETY DATA SHEET

Print Date: 11/06/11
Version: 0
Revision date:

1. COMPANY AND PRODUCT IDENTIFICATION

Product name: Freylube Prema
Product code: SUM33-SL078
Application: Lubricating Grease

Supplier:
Freylube Division
41 East Tupper Street
Buffalo, New York 14203
E-Mail:

Emergency Telephone number: * 24 HOUR TRANSPORTATION:
**CHEMTREC: 1-800-424-9300
703-527-3887 (Call collect outside of US)
* 24 HOUR EMERGENCY HEALTH & SAFETY:** (800) 523-7010 (Within US only) Outside of US call (703) 527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>OSHA Ceiling Limits</th>
<th>OSHA TWA (final)</th>
<th>ACGIH Ceiling Limits</th>
<th>ACGIH Exposure Limits</th>
<th>Vendor Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>8012-95-1</td>
<td>90-100%</td>
<td></td>
<td>5 mg/m³</td>
<td></td>
<td>5 mg/m³</td>
<td>None</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>1-5%</td>
<td></td>
<td>15 mg/m³</td>
<td></td>
<td>2 mg/m³ (TWA)</td>
<td></td>
</tr>
</tbody>
</table>

* May include one or more of the following CAS #: 64741-88-4, 64741-89-5, 64741-44-2, 64741-96-4, 64741-97-5, 64742-46-7, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-62-7, 64742-65-0, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 69029-75-0, 64742-01-4, and 64741-95-3

3. HAZARDS IDENTIFICATION

Emergency Overview
Irritating to eyes.
May cause skin irritation and/or dermatitis.
May be harmful if swallowed.

Signal word: CAUTION

Principle routes of exposure: Eyes, skin and inhalation.
Eye contact: Irritating to eyes

Skin contact: Repeated or prolonged contact with base product may cause irritation leading to various skin disorders such as dermatitis, oil acne, or folliculitis.

Inhalation: Inhalation of vapor (generated at high temperatures only) or oil mist from this product may cause mild irritation of the upper respiratory tract.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Physico-chemical properties: No hazards resulting from material as supplied.

### 4. FIRST AID MEASURES

**General advice:** Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use.

**Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin contact:** Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use.

**Ingestion:** If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**Inhalation:** Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician if necessary.

**Note to physician:** Treat symptomatically.

**Medical condition aggravated by exposure:** Dermatitis

### 5. FIRE-FIGHTING MEASURES

**Flash Point (°C): 281**

**Flash Point (°F): 538**

**Flash Point Method: COC**

**Flammable limits in air - lower (%):** Not determined

**Flammable limits in air - upper (%):** Not determined

**Suitable extinguishing media:** Use dry chemical, CO2, water spray or ‘alcohol’ foam.

**Unusual hazards:** None known

**Special protective equipment for fire-fighters:**

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

**Specific methods:** Water mist may be used to cool closed containers.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.
Environmental precautions: Do not flush into surface water or sanitary sewer system.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

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7. HANDLING AND STORAGE

Handling

Technical measures/precautions: Provide sufficient air exchange and/or exhaust in work rooms.

Safe handling advice: In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Storage

Technical measures/storage conditions:

Store at room temperature in the original container

Incompatible products: Strong oxidizing agents

Safe storage temperature: 5-35 °C

Shelf life: 2 years

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA Ceiling Limits</th>
<th>OSHA TWA (final)</th>
<th>ACGIH Ceiling Limits</th>
<th>ACGIH Exposure Limits</th>
<th>NIOSH - Pocket Guide</th>
<th>Vendor Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>None</td>
<td>5mg/m³</td>
<td>None</td>
<td>5 mg/m³</td>
<td>5mg/m³</td>
<td>None</td>
</tr>
<tr>
<td>Graphite</td>
<td>None</td>
<td>15 mg/m³</td>
<td>None</td>
<td>2 mg/m³ (TWA)</td>
<td>2.5 mg/m³ (TWA)</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering measures: Ensure adequate ventilation.

Personal Protective Equipment:

General: Eye Wash and Safety Shower

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH-certified respirator with organic vapor/P100 filter should be worn.

Eye protection: Safety glasses with side-shields.

Hand protection: Recommended: neoprene, latex, nitrile, butyl rubber and polyethylene type.

Skin and body protection: Long sleeved clothing.

Hygiene measures: Avoid contact with skin, eyes and clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Semi-solid  
Color: Black  
Odor: Characteristic  
Vapour density: Not determined  
Vapor pressure (kPa): Not determined  
Solubility in water: Insoluble  
Evaporation rate: Not determined  
pH: NA  
Flash Point (°C): 281  
Flash Point (°F): 538  
Decomposition temperature (°C): Not determined  
Auto-ignition temperature (°C): Not determined  
Density @ 15.5 °C (g/cc): 0.900  
Bulk density @ 60 °F (lb/gal): 7.34 @ 16 °C.  
Partition coefficient (n-octanol/water): Not determined  
Explosive Limits:  
  - upper limit: No data available  
  - lower limit: No data available

10. STABILITY AND REACTIVITY

Stability:  
Stable under recommended storage conditions.

Conditions to avoid:  
None known

Materials to avoid:  
Strong oxidizing agents

Hazardous decomposition products:  
Carbon oxides.

Hazardous Polymerization:  
Not applicable

11. TOXICOLOGICAL INFORMATION

MINERAL OIL INFORMATION: Any product containing a substance for which OSHA has established a permissible exposure limit (PEL) is considered hazardous. OSHA has established a PEL of 5 mg/m³ for worker exposure to air borne mists of mineral oils. Therefore, the presence of mineral oils brings this product within the provisions of the OSHA Hazard Communication Standard where the PEL reaches or exceeds 5 mg/m³. Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

No toxicological information is available on the product. Data obtained on components are summarized below.

SDS code: SUM33-SL078  
Product name: Freylube Prema  
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<table>
<thead>
<tr>
<th>Components</th>
<th>IARC Carcinogens</th>
<th>NTP:</th>
<th>OSHA - Select Carcinogens</th>
<th>Acute Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed as carcinogenic or possibly carcinogenic to humans</td>
<td>Not listed as known or reasonably anticipated to be a human carcinogen</td>
<td>Not listed as a select carcinogen</td>
<td>Mouse Oral LD50 = 22 g/kg</td>
</tr>
<tr>
<td>Graphite</td>
<td>Not listed as carcinogenic or possibly carcinogenic to humans</td>
<td>Not listed as known or reasonably anticipated to be a human carcinogen</td>
<td>Not listed as a select carcinogen</td>
<td>No data</td>
</tr>
</tbody>
</table>

**12. ECOLOGICAL INFORMATION**

Persistence and degradability: No information available
Mobility: No data available
Bioaccumulation: Not available
Ecotoxicity effects: No data available
Aquatic toxicity: Not Determined

**Component Information**

<table>
<thead>
<tr>
<th>Components</th>
<th>Ecotoxicity - Fish Species Data:</th>
<th>Ecotoxicity - Freshwater Algae Data:</th>
<th>Ecotoxicity - Water Flea Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Graphite</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
</tbody>
</table>

**13. DISPOSAL CONSIDERATIONS**

Waste from residues/unused products: Waste disposal must be in accordance with appropriate Federal, State, and local 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.
Contaminated packaging: Do not re-use empty containers
Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

**14. TRANSPORT INFORMATION**

U. S. DEPARTMENT OF TRANSPORTATION:
Proper shipping name: Not Regulated

TDG (CANADA):
Proper shipping name: Not Regulated

IMDG/IMO:
Proper shipping name: Not Regulated

IATA/ICAO:
Proper shipping name: Not Regulated

SDS code: SUM33-SL078
Product name: Freylube Prema
15. REGULATORY INFORMATION

CANADIAN REGULATIONS:

Canada - WHMIS Classification Information: This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Canadian Product Classification: Class D2A
Class D2B

Product Classification Graphic(s):

Component Classification Data:

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS hazard class</th>
<th>CEPA Schedule I</th>
<th>Challenge Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>1% Uncontrolled product according to WHMIS classification criteria.</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Graphite</td>
<td>D2A D2B</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

U.S. FEDERAL REGULATIONS:

OSHA Hazard Communication Standard: This product is considered to be hazardous under the OSHA Hazard Communication Standard.

CERCLA/SARA Information:

SARA (311, 312) hazard class: This product possesses the following SARA Hazard Categories:
Immediate Health (Acute): Yes
Delayed Health (Chronic): No
flammability: No
Pressure: No
Reactivity: No

<table>
<thead>
<tr>
<th>Components</th>
<th>Hazardous Substances and RQs</th>
<th>Extremely Hazardous Substances and TPQs</th>
<th>SARA 313 Emission Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Graphite</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA 313 Emission reporting: This product contains no components subject to the reporting requirements of SARA 313.

Clean Air and Clean Water Acts:

<table>
<thead>
<tr>
<th>Components</th>
<th>Hazardous Air Pollutants</th>
<th>CWA - Hazardous Substances</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
</tr>
</thead>
</table>
Mineral Oil* | Not listed | Not listed | Not listed | Not listed | Not listed
---|---|---|---|---|---
Graphite | Not listed | Not listed | Not listed | Not listed | Not listed

RCRA Status: Not regulated

**U.S. STATE REGULATIONS (RTK):**

<table>
<thead>
<tr>
<th>Components</th>
<th>California Proposition 65</th>
<th>PARTK</th>
<th>MJ Critical Materials</th>
<th>NJRTK</th>
<th>MARTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Oil*</td>
<td>Not Listed</td>
<td>Present</td>
<td>Not Listed</td>
<td>1437</td>
<td>Present</td>
</tr>
<tr>
<td>Graphite</td>
<td>Not Listed</td>
<td>Present</td>
<td>Not Listed</td>
<td>3325</td>
<td>Present</td>
</tr>
</tbody>
</table>

**INVENTORY STATUS:**

United States TSCA - Sect. 8(b) Inventory: This product complies with TSCA

Canada DSL/NDSL Inventory List: This product complies with DSL

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**16. OTHER INFORMATION**

Sources of key data used to compile the data sheet: Material safety data sheets of the ingredients.

Prepared by: Safety, Health and Environmental Department

Reason for revision: New formulation

**HMIS classification:**

<table>
<thead>
<tr>
<th>Health:</th>
<th>Flammability:</th>
<th>Reactivity:</th>
<th>Personal Protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**HMIS Use Dilution:**

<table>
<thead>
<tr>
<th>Health:</th>
<th>Flammability:</th>
<th>Reactivity:</th>
<th>Personal Protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**NFPA rating:**

<table>
<thead>
<tr>
<th>Health:</th>
<th>Flammability:</th>
<th>Reactivity:</th>
<th>Special:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>NA</td>
</tr>
</tbody>
</table>

* Indicates possible chronic health effect

Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.

**Disclaimer**

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. Freyelube Division ("Freyelube") assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of Freyelube.

**End of Safety Data Sheet**