

# SAFETY DATA SHEET

## 1. Identification

### Identification

**Product name:** LUBRIZOL® 6178

### Additional identification

**Chemical name:** Mixture

### Recommended use and restriction on use

**Recommended use:** Not determined.

**Restrictions on use:** Not determined.

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

#### Supplier

**Company Name:** THE LUBRIZOL CORPORATION

**Address:** 9921 BRECKSVILLE RD

BRECKSVILLE, OH 44141

US

**Telephone:** 216-447-5000

### Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300 (LUBRIZOL)

## 2. Hazard(s) identification

### Hazard Classification

#### Unknown toxicity

Acute toxicity, oral 0.0 %

Acute toxicity, dermal 0.0 %

Acute toxicity, inhalation, vapor 26.8 %

Acute toxicity, inhalation, dust  
or mist 26.9 %

### Label Elements:

**Hazard Symbol:** No symbol

**Signal Word:** No signal word.

**Hazard Statement:**

### Precautionary Statement:

**Prevention:** Avoid release to the environment.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None identified.

## 3. Composition/information on ingredients

Chemical name	CAS number	Percent by Weight
Mineral oil	64742-52-5	50 - 60%
Alkylamine salt of alkyl phosphoric acid	Not determined.	20 - 30%
Oleyl alcohol	143-28-2	1 - 5%

#### 4. First-aid measures

<b>Ingestion:</b>	Treat symptomatically. Get medical attention.
<b>Inhalation:</b>	Remove exposed person to fresh air if adverse effects are observed.
<b>Skin Contact:</b>	Wash with soap and water. Get medical attention if symptoms occur. Launder contaminated clothing before reuse.
<b>Eye contact:</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

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

**Symptoms:** See section 11.

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

**Treatment:** Treat symptomatically.

#### 5. Fire-fighting measures

**General Fire Hazards:** No unusual fire or explosion hazards noted.

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** CO<sub>2</sub>, Dry chemical or Foam. Water can be used to cool and protect exposed material.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. See section 10 for additional information.

#### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Recommend wearing self-contained breathing apparatus.

#### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Ventilate area if spilled in confined space or other poorly ventilated areas. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.

**Methods and material for containment and cleaning up:** Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

## 7. Handling and storage

**Precautions for safe handling:** Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Use grounding and bonding connection when transferring material. In case of spills, beware of slippery floors and surfaces. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid environmental contamination.

**Maximum Handling Temperature:** 60 °C 140 °F

**Conditions for safe storage, including any incompatibilities:** Store away from incompatible materials. See section 10 for incompatible materials.

**Maximum Storage Temperature:** 45 °C 113 °F

## 8. Exposure controls/personal protection

### Control Parameters:

#### Occupational Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Mineral oil - Inhalable fraction.	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (03 2014)
Mineral oil - Mist.	REL	5 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Mineral oil - Mist.	STEL	10 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
Mineral oil - Mist.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

**Appropriate engineering controls:** Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air. Adequate ventilation should be provided so that exposure limits are not exceeded.

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

**General information:** Use personal protective equipment as required.

**Eye/face protection:** If contact is likely, safety glasses with side shields are recommended.

#### Skin Protection

**Hand Protection:** Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water. Consult clothing/glove manufacturer to determine appropriate type of glove for given situation. Nitrile. Chemical resistant gloves. Chemical resistant gloves.

**Other:** Do not wear rings, watches or similar apparel that could entrap the material. Long sleeve shirt is recommended.

**Respiratory Protection:** Use disposable dust/mist mask if the recommended exposure limit is exceeded. Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

**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 to remove contaminants. Discard contaminated footwear that cannot be cleaned.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Slight petroleum
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	309 °F (154 °C) (Pensky-Martens Closed Cup)
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.

### Upper/lower limit on flammability or explosive limits

<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	0.9 - 0.93 60.1 °F (15.6 °C)
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Insoluble in water
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	35 mm <sup>2</sup> /s ( 104 °F (40 °C) ) 6.3 mm <sup>2</sup> /s (100 °C (212 °F) )

### Other information

<b>Pour Point Temperature:</b>	5 °F (-15 °C)
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**10. Stability and reactivity**

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of Hazardous Reactions:</b>	Will not occur.
<b>Conditions to Avoid:</b>	Do not expose to excessive heat, ignition sources, or oxidizing materials.
<b>Incompatible Materials:</b>	Oxidizing agents. Contact with acids.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. Thermal decomposition may generate phosphorus oxides and other phosphorus containing compounds.

**11. Toxicological information****Information on likely routes of exposure**

<b>Inhalation:</b>	No data available.
<b>Ingestion:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.

**Information on toxicological effects****Acute toxicity****Oral**

Product: Not classified for acute toxicity based on available data.

**Dermal**

Product: Not classified for acute toxicity based on available data.

**Inhalation**

Product: Not classified for acute toxicity based on available data.

**Skin Corrosion/Irritation:**

Product: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

**Serious Eye Damage/Eye Irritation:**

Product: Remarks: Not classified as a primary eye irritant.

**Respiratory sensitization:**

No data available

**Skin sensitization:**

Mineral oil Classification: Not a skin sensitizer. (Read across)

Alkylamine salt of alkyl phosphoric acid Classification: Not a skin sensitizer. (Measured) Not a skin sensitizer.

**Specific Target Organ Toxicity - Single Exposure:**

**Product:** If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Alkylamine salt of alkyl phosphoric acid If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

**Aspiration Hazard:** No data available

**Chronic Effects**

**Carcinogenicity:**

**Product:** This product contains mineral oils which are severely refined and not considered carcinogenic. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

Mineral oil All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test. This product contains mineral oils which are severely refined and not considered carcinogenic.

**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:**

No data available

**Reproductive toxicity:**

No data available

**Specific Target Organ Toxicity - Repeated Exposure:**

No data available

**12. Ecological information**

**Ecotoxicity**

**Fish**

Alkylamine salt of alkyl phosphoric acid LC 50 (Rainbow Trout, 4 h): > 1,000 mg/l

**Aquatic Invertebrates**

Mineral oil EC 50 (Water flea (Daphnia magna), 2 d): > 10,000 mg/l  
EC 50 (Water flea (Daphnia magna), 21 d): > 10 mg/l  
NOEC (Water flea (Daphnia magna), 21 d): 10 mg/l

Alkylamine salt of alkyl phosphoric acid EC 50 (Water flea (Daphnia magna), 2 d): 91 mg/l

**Toxicity to Aquatic Plants**

Alkylamine salt of alkyl phosphoric acid LC 50 (Green algae (*selenastrum capricomutum*), 3 h): > 10 mg/l

**Toxicity to soil dwelling organisms**

No data available

**Sediment Toxicity**

No data available

**Toxicity to Terrestrial Plants**

No data available

**Toxicity to Above-Ground Organisms**

No data available

**Toxicity to microorganisms**

Mineral oil EC 50 (Sludge, 0.1 d): > 10,000 mg/l

Alkylamine salt of alkyl phosphoric acid LC 50 (Sludge, 0.1 h): 320 mg/l

**Persistence and Degradability**

**Biodegradation**

Mineral oil OECD TG 301 F, 31 %, 28 d, Not readily degradable.

Alkylamine salt of alkyl phosphoric acid OECD TG 301 B, 0.000001 %, 28 d, Not readily degradable.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

No data available

**Partition Coefficient n-octanol / water (log Kow)**

Alkylamine salt of alkyl phosphoric acid Log Kow: 8 (calculated)

**Mobility:**

No data available

**Other Adverse Effects:**

No data available.

**13. Disposal considerations**

**Disposal instructions:**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

**Contaminated Packaging:**

Container packaging may exhibit hazards.

**14. Transport information**

**DOT**

Not regulated.

**IMDG**

Not regulated.

**IATA**

Not regulated.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

None known.

**SARA 302 Extremely Hazardous Substance****SARA 304 Emergency Release Notification****SARA 311/312 Hazardous Chemical****SARA 313 (TRI Reporting)**

This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization Act (SARA). For additional information please contact Lubrizol Customer Assistance: America(s): AmerLZAMCustomerAssistance@Lubrizol.com ; Europe: EMEAICustomerAssistance@Lubrizol.com ; Asia: APCustomerAssistance@Lubrizol.com

**US State Regulations****US. California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Methanol	0.119%
Cyanide	25.00PPB

**Inventory Status****Australia (AICS)**

All components are in compliance with chemical notification requirements in Australia.

**Canada (DSL/NDSL)**

All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.

**China (IECSC)**

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

**European Union (REACH)**

To obtain information on the REACH compliance status of this product, please visit [Lubrizol.com/REACH](http://Lubrizol.com/REACH), or e-mail us at [REACH\\_MSDS\\_INQUIRIES@Lubrizol.com](mailto:REACH_MSDS_INQUIRIES@Lubrizol.com)

**Japan (ENCS)**

All components are in compliance with the Chemical Substances Control Law of Japan.

**Korea (ECL)**

All components are in compliance in Korea.

**New Zealand (NZIoC)**

All components are in compliance with chemical notification requirements in New Zealand.

**Philippines (PICCS)**

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).



**Switzerland (SWISS)**

All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

**Taiwan (TCSCA)**

All components of this product are listed on the Taiwan inventory.

**United States (TSCA)**

All components of this material are on the US TSCA Inventory.

*The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.*

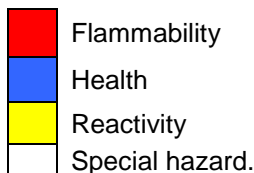
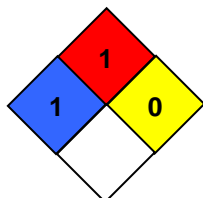
**16. Other information, including date of preparation or last revision**

**HMIS Hazard ID**

<b>Health</b>		<b>1</b>
<b>Flammability</b>		<b>1</b>
<b>Physical Hazards</b>		<b>0</b>

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

<b>Issue Date:</b>	04/27/2015
<b>Version #:</b>	1.0
<b>Source of information:</b>	Internal company data and other publically available resources.
<b>Further Information:</b>	Contact supplier (see Section 1)
<b>Disclaimer:</b>	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 regulations remains the responsibility of the user.