

SAFETY DATA SHEET

1. Identification

Identification

Product name: LUBRIZOL® 6178

Additional identification

Chemical name: Mixture

Recommended use and restriction on use

Recommended use: Automotive gear oil additive

Restrictions on use: None identified.

Details of the supplier of the safety data sheet

Supplier

Company Name: THE LUBRIZOL CORPORATION

Address: 29400 LAKELAND BOULEVARD WICKLIFFE, OH 44092-2298 US

Telephone: 440)943-1200

Distributor

Company Name: ISUZU AUSTRALIA LTD

Address: 66 FOUNDATION ROAD TRUGANINA VIC 3029

Telephone: +613 9644 4444

Emergency Telephone number:

Australia: 1800 638 556 (24HR)

New Zealand: 0800 154 166 (24HR)

2. Hazard(s) identification

Hazard Classification: Not classified

Label Elements:

Hazard Symbol: No symbol

• **Signal Word:** No signal word.

• **Hazard Statement:** Not applicable

• **Precautionary Statements:** Not applicable

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%

4. First-aid measures

Ingestion:	Treat symptomatically. Get medical attention.
Inhalation:	Remove exposed person to fresh air if adverse effects are observed.
Skin Contact:	Wash with soap and water. Get medical attention if symptoms occur. Launder contaminated clothing before reuse.
Eye contact:	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: CO₂, 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.

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

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.

7. Handling and storage

Precautions for safe handling: Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid environmental contamination.
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.

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 ³	US. ACGIH Threshold Limit Values, as amended (03 2014)
Mineral oil - Mist.	REL	5 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Mineral oil - Mist.	STEL	10 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Mineral oil	IDLH	2,500 mg/m ³	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended (10 2017)
Mineral oil - Mist.	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)

Appropriate engineering controls: Adequate ventilation should be provided so that exposure limits are not exceeded. No special requirements under ordinary conditions of use and with adequate ventilation. 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.

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

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

Respiratory Protection: 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. 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.

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

Physical state:	liquid
Form:	liquid
Color:	Amber
Odor:	Slight petroleum
Odor threshold:	No data available.
pH:	Not applicable
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	309 °F (154 °C) (Pensky-Martens Closed Cup)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
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:	No data available.
Vapor density:	No data available.
Relative density:	0.9 - 0.93 60.1 °F (15.6 °C)
Solubility(ies)	
Solubility in water:	Insoluble in water
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:	35 mm ² /s (104 °F (40 °C)) 6.3 mm ² /s (100 °C (212 °F))

Other information

Pour Point Temperature: -15 °C

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Do not expose to excessive heat, ignition sources, or oxidizing materials. Excessive heat.
Incompatible Materials:	Strong acids. Oxidizing agents. Strong oxidizing agents. Strong oxidizing agents.
Hazardous Decomposition Products:	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**

Inhalation: No data available.

Ingestion: No data available.

Skin Contact: No data available.

Eye contact: No data available.

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

Product: Not classified for acute toxicity based on available data. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal

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

InhalationMineral oil
Dusts, mists and fumes: LC 50 (Rat, , 4 h): > 5 mg/l (Literature) Not classified
Dusts, mists and fumes Vapour: LC 50 (Rat, , 4 h): > 20 mg/l (Read across) Not classified
Vapour

Skin Corrosion/Irritation:

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

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)

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.

No data available

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), as amended:

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

Mineral oil

LC 50 (Fathead Minnow, 96 h): > 100.1 mg/l

Aquatic Invertebrates

Mineral oil

EC 50 (Water flea (Daphnia magna), 48 h): > 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

Toxicity to Aquatic Plants

Mineral oil

EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 100.1 mg/l

NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): >= 100.1 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

Persistence and Degradability

Biodegradation

Mineral oil

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

Bioaccumulative potential

Bioconcentration Factor (BCF)

No data available

Partition Coefficient n-octanol / water (log Kow)

No data available

Mobility:

No data available

Other adverse effects

Product:

Harmful to aquatic life with long lasting effects.

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 MARPOL and the IBC Code

None known.

The DOT shipping information in this section is based on a bulk container. Please review the accompanying shipping papers for the correct shipping descriptions based the size of the package. 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. During transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. 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.

CERCLA Hazardous Substance List (40 CFR 302.4)

None present or none present in regulated quantities.

Superfund amendments and reauthorization act of 1986 (SARA)

SARA 311 Classifications

Not classified

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



This product can expose you to chemicals including: Methanol (499.00PPM) which is [are] known to the State of California to cause birth defects or other reproductive harm.

Inventory Status

Australia (AICC)

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

Canada (DSL/NDSL)

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

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 e-mail REACH@SDSInquiries.com.

Great Britain (UK REACH)

To obtain information on the UK REACH compliance status of this product, please e-mail REACH@SDSInquiries.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.

Turkey (KKDIK)

To obtain information on the KKDIK compliance status of this product, please e-mail REACH@SDSInquiries.com.

United States (TSCA)

All substances contained in this product are listed on the TSCA inventory or are exempt.

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

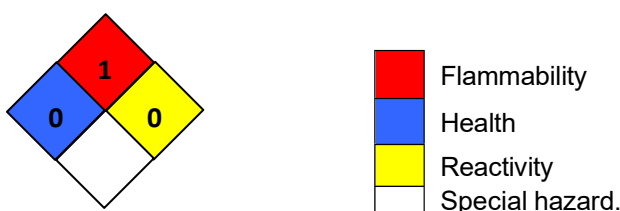
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	0
Flammability	1
Physical Hazards	0

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

Issue Date: 12/11/2021
Version #: 3.0
Source of information: Internal company data and other publically available resources.
Further Information: Contact supplier (see Section 1)

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