

# SAFETY DATA SHEET

## 1. Identification

### Identification

**Product name:** PARATHERM™ EC

### Additional identification

**Chemical name:** Mixture

### Recommended use and restriction on use

**Recommended use:** Heat Transfer Fluid

**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

### Emergency telephone number:

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

## 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	8042-47-5	60 – 70%
Mineral oil	Mixture	10 – 20%

The mineral oil contained in this material may be described by one or more of the following CAS Nos.: 64742-54-7, 64742-65-0, 64742-55-8, and 64742-56-9.

## 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:** Not determined.

**Specific hazards arising from the chemical:** 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:** No data available.

**Environmental Precautions:** Avoid release to the environment. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages. 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:** 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.

**Maximum Handling Temperature:** 70 °C 158 °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, as amended (02 2012)
Mineral oil - Mist.	REL	5 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Mineral oil - Mist.	STEL	10 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Mineral oil - Mist.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
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**Appropriate engineering controls:** Adequate ventilation should be provided so that exposure limits are not exceeded. 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. No special requirements under ordinary conditions of use and with adequate ventilation.

### 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. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear. Consult clothing/glove manufacturer to determine appropriate type of glove for given situation. Gloves are recommended when handling this material. Unless material is used in a process where the use of gloves would pose sufficient risk of injury to the user/operator. Consult with an industrial hygienist to determine the appropriate clothing protection for your specific use of this material.

**Other:**

Chemical resistant boots.

**Respiratory Protection:**

Use respirator with an organic vapor cartridge if exposure limit is exceeded. 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>	Dark amber
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	Not applicable
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	No data available.
<b>Flash Point:</b>	284 °F (140 °C) (ASTM D 93 ( Pensky-Martens Closed Cup))
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<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>	No data available.
<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.

**Decomposition temperature:** No data available.  
**Viscosity:** 33.7 mm<sup>2</sup>/s ( 104 °F (40 °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.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion.

## 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.

##### 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: 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. (Literature)

Mineral oil

Classification: Not a skin sensitizer. (Read across)

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

Mineral oil

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

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**Aspiration Hazard:**

Mineral oil

Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.

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**Other effects:**

**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.

**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 (Not reported, 96 h): > 10,000 mg/l  
NOEC (Not reported, 96 h): > 10,000 mg/l

Mineral oil LC 50 (Fathead Minnow, 4 d): > 100 mg/l

**Aquatic Invertebrates**

Mineral oil EC 50 (Water flea (Daphnia magna), 2 d): > 100 mg/l  
NOEC (Water flea (Daphnia magna), 2 d): >= 100 mg/l  
EC 50 (Water flea (Daphnia magna), 21 d): > 10 mg/l  
NOEC (Water flea (Daphnia magna), 21 d): 10 mg/l

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

**Toxicity to Aquatic Plants**

Mineral oil LC 50 (Algae (Pseudokirchneriella subcapitata), 3 d): > 100 mg/l  
NOEC (Algae (Pseudokirchneriella subcapitata), 3 d): > 100 mg/l

Mineral oil EC 50 (Green algae (Scenedesmus quadricauda), 3 Days): > 100 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**

No data available

**Persistence and Degradability**

**Biodegradation**

Mineral oil OECD TG 301 F, 31.13 %, 28 d, Not readily degradable.

Mineral oil OECD TG 301 B, 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**

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. Since emptied containers retain product residue, follow label warnings even after container is emptied.

**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**

No ingredient requiring a warning under CA Prop 65.



### Inventory Status

#### Australia (AIIIC)

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.

#### 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 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.*

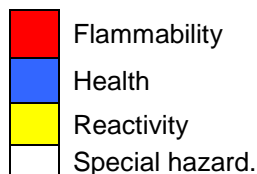
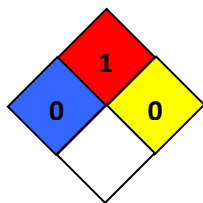
## 16. Other information, including date of preparation or last revision

### 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:** 05/07/2021  
**Version #:** 1.0  
**Source of information:** Internal company data and other publically available resources.  
**Further Information:** Contact supplier (see Section 1)

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