



SAFETY DATA SHEET

1. Identification

Identification

Product name: PARATHERM™ HE

Additional identification

Chemical name: Mineral oil

Recommended use and restriction on use

Recommended use: Heat Transfer Fluid

Restrictions on use: Lubricating oils; Hydraulic fluid additive

Details of the supplier of the safety data sheet

Supplier

Company Name: PARATHERM
A DIV. OF THE LUBRIZOL CORPORATION
Address: 31 PORTLAND ROAD
WEST CONSHOHOCKEN, PA 19428
US
Telephone: 610-941-4900

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

Not classified

Label Elements:

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: not applicable

Precautionary Statement: not applicable

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

3. Composition/information on ingredients

General information:

Chemical name	CAS number	Percent by Weight
Mineral oil	64742-54-7	100%

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. Water may cause splattering.

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: 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. 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.

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: Not determined.

Conditions for safe storage, including any incompatibilities: Store away from incompatible materials. See section 10 for incompatible materials. Store in dry, well ventilated place away from sources of heat and direct sunlight.

Maximum Storage Temperature: Not determined.

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 (03 2014)

Appropriate engineering controls: No special requirements under ordinary conditions of use and with adequate ventilation. 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. When needed, use gloves with insulation for thermal protection.

Other: Long sleeve shirt is recommended. When working with heated material, wear heat protective clothing.

Respiratory Protection: Use disposable dust/mist mask if the recommended 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. 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: Pale yellow
Odor: Mild
Odor threshold: No data available.

pH:	No data available.
Freezing point:	No data available.
Boiling Point:	> 649 °F (343 °C)
Flash Point:	> 410 °F (210 °C) (ASTM D93 (Pensky-Martens (A and B Closed Cup)))
Evaporation rate:	< 1 n-butyl acetate=1
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:	< 1 torr (21.1 °C 70.0 °F)
Vapor density:	> 1
Relative density:	0.868 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:	39 - 43 mm ² /s (104 °F (40 °C))

Other information

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: 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.
Remarks: 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:

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):

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

No data available

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

Toxicity to Aquatic Plants

No data available

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 %, 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 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**

No ingredient regulated by CA Prop 65 present.

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, or e-mail us at 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.

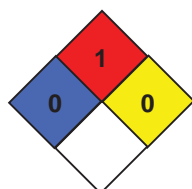
16. Other information, including date of preparation or last revision

HMIS Hazard ID

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



Flammability
Health
Reactivity
Special hazard.

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

Issue Date: 08/04/2015

Version #: 1.1

Source of information: Internal company data and other publically available resources.

Further Information: Contact supplier (see Section 1)

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