SAFETY DATA SHEET

1. Identification

Identification

Product name: **PARATHERM(TM) MR**

Additional identification

Chemical name: Hydrocarbon polymer

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: 2009 Renaissance Boulevard
King of Prussia, PA 19406
US
Telephone: 610-941-4900

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

2. Hazard(s) identification

Hazard Classification

Health Hazards

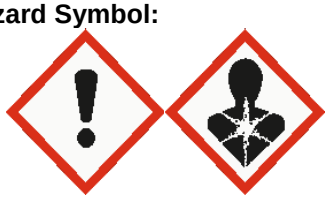
Acute toxicity (Inhalation - dust and mist)	Category 4
Aspiration Hazard	Category 1

Unknown toxicity

Acute toxicity, oral	50.0 %
Acute toxicity, dermal	50.0 %
Acute toxicity, inhalation, vapor	100.0 %
Acute toxicity, inhalation, dust or mist	0.0 %

Label Elements:

Hazard Symbol:



Signal Word: Danger

Hazard Statement: May be fatal if swallowed and enters airways.
Harmful if inhaled.

Precautionary Statements:

Prevention: Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Call a POISON CENTRE/doctor if you feel unwell.

Storage: Store locked up.

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

General information:

Chemical name	CAS number	Percent by Weight
Hydrocarbon polymer	Confidential	50 - 60%
Alkanes	151006-58-5	50 - 60%

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Ingestion: Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Immediately call a POISON CENTER/doctor.

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

Skin Contact: Wash with soap and water. If skin irritation occurs, get medical attention.

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: CO_2, dry chemical, foam, water spray, water fog.

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 closed spaces before entering them. Keep upwind. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment. 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. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Avoid breathing dust/fume/gas/mist/vapours/spray. Observe good industrial hygiene practices. Use only in well-ventilated areas. 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.

Maximum Storage Temperature: Not determined.

8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits

None of the components have assigned exposure limits.

Other exposure limits

Chemical name	Type	Exposure Limit Values	Source
Hydrocarbon polymer	TWA	1 mg/m3	

Appropriate engineering controls: No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

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

Skin Protection

Hand Protection: Nitrile. Suitable gloves can be recommended by the glove supplier.

Other: No data available.

Respiratory Protection: A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Clear
Odor: Odorless
Odor threshold: No data available.

pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	> 300 °F (149 °C) (ASTM D93 (Pensky-Martens (A and B 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:	< 0.013 kPa (20 °C 68 °F)
Vapor density:	No data available.
Relative density:	0.802 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:	5.2 mm2/s (104 °F (40 °C)) 1.9 mm2/s (100 °C (212 °F))
Other information	
Pour Point Temperature:	< -65 °F (-54 °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:	Not determined.
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:	Harmful if inhaled.
Ingestion:	No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity

Oral

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

Dermal

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

Inhalation

Product**:** ATEmix (, 4 h): 1 - 2 mg/l. Dusts, mists and fumes

Skin Corrosion/Irritation:

Product**:** Prolonged or repeated contact may cause irritation.
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:

Hydrocarbon polymer Classification: Not a skin sensitizer. (read across) Not a skin sensitizer.

Specific Target Organ Toxicity - Single Exposure:

Product**:**

Hydrocarbon polymer 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:

Product**:** May be fatal if swallowed and enters airways.

Other effects:

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

Chronic Effects

Carcinogenicity:

No data available

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
No data available

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
No data available

Bioaccumulative Potential

Bioconcentration Factor (BCF)
No data available

Partition Coefficient n-octanol / water (log Kow)

Hydrocarbon polymer	Log Kow: 10.09 20 °C 68 °F

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 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

Acute toxicity (any route or exposure)
Aspiration Hazard

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 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 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.

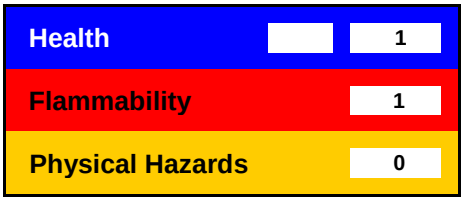
Taiwan (TCSCA)
All components of this product are listed on the Taiwan inventory.

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.

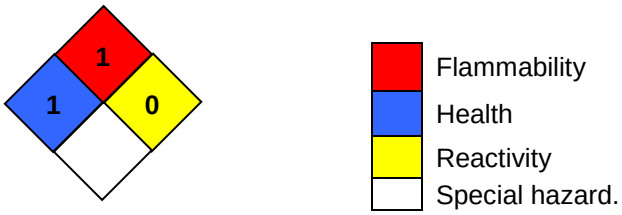
16.Other information, including date of preparation or last revision

HMIS Hazard ID



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:	02/19/2018
Version #:	2.0
Source of information:	Internal company data and other publically available resources.
Further Information:	Contact supplier (see Section 1)
Disclaimer:	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.