

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Paratherm HE® Heat Transfer Fluid

Company Identification: Paratherm
31 Portland Road
West Conshohocken, PA 19428 USA

Product Information: 610-941-4900
info@paratherm.com

Emergency Telephone: 610-941-4900
Chemtrec (USA): 800-424-9300
Chemtrec (outside USA): 703-527-3887

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview

Almost water white oil with minimal odor when new.
May turn dark and develop characteristic petroleum odor when product is used.
Combustible liquid.

Potential Health Effects:

Eye: Non-irritating to eyes on direct contact before use. Used product may be mildly irritating to eyes.

Skin: Non-irritating on direct single or repeated and prolonged contact when new. Repeated or prolonged contact of used product may cause skin irritation.

Ingestion: No harmful effects are expected from ingesting unused product or small amounts of used product. Ingestion of used product may cause abdominal discomfort.

Inhalation: Exposure to smoke or mist while product is in use may cause irritation to upper respiratory tract and lungs.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Hydrotreated heavy paraffinic distillate	64742-54-7	100%

SECTION 4 FIRST AID MEASURES

Eye: Flush eyes with water. If symptoms persist, seek medical attention. If fluid is hot, treat burns and seek medical assistance.

Skin: Wash exposed areas with warm water and soap. If fluid is hot, submerge injured area in cold water. Seek medical attention for severe burns.

Ingestion: If abdominal discomfort occurs, seek medical attention.

Inhalation: If smoke or mist is generated when fluid is in use, remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if available. If victim is unconscious, remove to fresh air and seek medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Water fog, foam, dry chemical, or carbon dioxide (CO₂) should be used. Do not use direct water stream

Fire Fighting Instructions: Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment (including drums) exposed to fire with water if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

Combustion Products: Airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: This material may burn but will not ignite readily. Eliminate all sources of ignition in vicinity of spilled material. Use personal protection recommended in Section 8.

Spill Management: Contain release to prevent further contamination of soil, surface water or groundwater. Use appropriate techniques such as non-combustible absorbent materials. Store collected material in a suitable, labeled container. Dispose of contaminated materials in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool to ambient before proceeding with disposal methods. Keep area around hot, spilled material well ventilated.

Reporting: Report spills to appropriate local authorities. This product is classified as an "Oil" under Section 311 of Clean Water Act. Discharge or spills that produce a visible sheen on surface water or in waterways/sewers that lead to surface water must be reported to appropriate authorities.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Product is not hazardous. Use good personal hygiene practices. Fire extinguishers should be kept readily available. Clean up any spill promptly.

Storage: Store closed containers away from heat, sparks, open flames, or oxidizing materials. Do not transfer to unmarked containers. Protect metal drums from direct sunlight and water.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Component: Heavy paraffinic distillate

OSHA PEL: 5 mg/m³ TWA

ACGIH TLV: 5 mg/m³ TWA

10 mg/m³ STEL

NIOSH: 2500mg/m³ IDLH

As oil mist if generated: 5 mg/m³ NOHSC TWA

- NOTE: Abbreviation listing in Section 16

Engineering Controls: Use in a well-ventilated area

Personal Protective Equipment:

Eye/Face Protection: Where splashing is possible, wear safety glasses with side shields.

Skin Protection: No protection required for short duration exposure to unused fluid. For prolonged or repeated exposure to used fluid, synthetic rubber (nitrile) protective covers (boots, aprons, gloves) may be desirable. If material will be handled while hot, wear insulated clothing. Use good personal hygiene practices before and after fluid handling.

Respiratory Protection: No respiratory protection is normally required. If a mist or smoke is generated during use, wear a NIOSH certified organic vapor respirator with a dust and mist filter.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Almost water white liquid
Odor:	none
pH:	NA
Density:	7.3 lb/gal @ 60°F (15.5°C)
Flashpoint:	> 410°F (210 °C) Closed Cup
Vapor Pressure:	<1mm @70°F (21.1°C)
Vapor Density (Air = 1):	>1
Evaporation Rate (BuAc = 1):	<1
Boiling Point:	>700°F (371°C)
Solubility:	Insoluble in water
Freeze Point:	Does not freeze

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability:	Stable under normal storage and handling conditions.
Conditions to Avoid:	None
Incompatibility With Other Materials:	May react with strong oxidizing agents.
Hazardous Polymerization:	Hazardous polymerization will not occur.
Hazardous Decomposition Products:	None known.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Meets IP346 criteria of less than 3% PAH. No other data available. Not known to have any toxic effects.

Carcinogenicity:

NTP: No

IARC: No

OSHA: No

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicity: Product is insoluble in water. Aquatic toxicology testing performed in Water Accommodated Fraction (WAF)

Invertebrates:	Water Flea (<i>Daphnia magna</i>) – 100% survival in WAF Mysid Shrimp (<i>Mysidopsis bahia</i>) – 100% survival in WAF
Fish:	Fathead Minnow (<i>Pimphales promelas</i>) – 100% survival in WAF

Biodegradability: Product is not expected to be biodegradable

SECTION 13 DISPOSAL CONSIDERATIONS

Uncontaminated material can be burned for fuel value in an approved facility or can be removed by a licensed waste oil recycler. Used product that has been contaminated with a regulated material may need to be incinerated. Refer to state and local regulations for more detailed information.

SECTION 14 TRANSPORT INFORMATION

US DOT: Not regulated

IATA & IMDG: Not regulated

SECTION 15 REGULATORY INFORMATION

United States

RCRA Hazardous Waste Number and Classification: Not applicable

TSCA Inventory Status: Included

SARA Title III Section 313 and 40 CFR 372: Not subject to reporting requirements

Clean Air Act Section 112: Not classified as a Hazardous Air Pollutant (HAP)

California Proposition 65: This product does not contain materials which the state of California has found to cause cancer, birth defects, or other reproductive harm.

International

Canada (WHMIS): Not controlled

This material is listed on the following inventories;

Australia (AICS)

Canada (DSL)

China

Europe (EINECS)

Korea (Existing and Evaluated Chemical Substances)

Philippines (PICCS)

Japan (ENCS)

SECTION 16 OTHER INFORMATION

Recommended Use: Heat transfer agent

Date of Revision: April 10, 2013

Reason for Revision: Revision to Company Name

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0
(0=Least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Abbreviations that may have been used in this document

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
IDLH	-	Immediate Danger to Life and Health	CAS	-	Chemical Abstract Service Number
NOHSC	-	Nat'l Occup. Health & Safety Comm.	OSHA	-	Occupational Safety and Health Administration
NFPA	-	Nat'l Fire Protection Association	DOT	-	Department of Transportation
<	-	Less Than	>	-	Greater Than
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard Z400.1).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.