



SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Paratherm LR™ Heat Transfer Fluid

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

Product Information: 1-610-941-4900
 info@paratherm.com

Emergency Telephone: 1-610-941-4900
Chemtrec (USA): 1-800-424-9300
Chemtrec (outside USA): 1-703-527-3887

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview

Harmful or fatal if swallowed or inhaled. Can cause lung damage
 Water white liquid with minimal odor before use.
 May turn dark and develop slight chemical odor when product is used.
 Combustible liquid. Vapors produced during use can form flammable and/or ignitable mixtures.

Potential Health Effects:

Eye: May cause temporary eye irritation on direct contact with unused product. Smoke or mist generated during use may also cause eye irritation.

Skin: May be irritating on direct single contact. Repeated or prolonged contact of used product may cause minor skin irritation.

Ingestion: Can cause lung damage or death if aspiration occurs while swallowing or during subsequent vomiting.

Inhalation: Exposure to mist or to smoke generated while product is in use may cause lung irritation or other pulmonary effects.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

| COMPONENTS | CAS NUMBER | AMOUNT |
|----------------------------------|------------|--------|
| Blend of paraffinic hydrocarbons | 64742-48-9 | 100% |

SECTION 4 FIRST AID MEASURES

Eye: Flush eyes with water. If irritation occurs, seek medical attention immediately. If fluid is hot, treat burns and seek medical assistance.

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

Ingestion: Seek immediate medical attention. Do not induce vomiting. If vomiting does occur, lower head below knees to avoid aspiration.

Inhalation: Remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration. If respiratory irritation, dizziness or breathing difficulties persist or if victim is unconscious, seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Flammable Limits @ 77°F (% volume in air): LEL: 0.7 UEL: 5.4

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

Fire Fighting Instructions: Product will produce invisible vapors that may settle in low areas or flow along ground. 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: Eliminate all sources of ignition in vicinity of spilled material. Use personal protection recommended in Section 8.

Spill Management: Product will produce invisible vapors that may settle in low areas or flow along ground. 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. 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: Keep containers closed and store away from heat, sparks, open flames, or oxidizing materials. Do not transfer to unmarked containers. Protect metal drums from direct sunlight and water.

Handling: This material is a static accumulator. Drums must be grounded while handling. Avoid generating mist.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Limits:****Component:** paraffinic hydrocarbon**OSHA PEL*:** TWA - not established**ACGIH TLV:** TWA - not established

STEL - not established

Engineering Controls: Use only in a well-ventilated area**Personal Protective Equipment:****Eye/Face Protection:** Where splashing is possible, wear safety glasses with side shields, chemical goggles or face shields.**Skin Protection:** No protection required for short duration exposure. For prolonged or repeated exposure to unused or used fluid, synthetic rubber (nitrile) protective covers (boots, aprons, gloves) should be worn. If material will be handled while hot, wear insulated clothing along with synthetic rubber covers. 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:** Water white liquid before use**Odor:** Odorless before use**pH:** NA**Density:** 6.35 lb/gal @ 75 °F (23.9 °C)**Flashpoint:** > 140°F (60°C) Tag Closed Cup**Vapor Pressure:** <1mm @70F (21.1°C)**Vapor Density (Air = 1):** >1**Evaporation Rate (BuAc = 1):** <0.1**Initial Boiling Point:** >300°F (148.9°C) ASTM D2887**Solubility:** Negligible in water.**Pour Point:** <-76°F (-60°C)**SECTION 10 STABILITY AND REACTIVITY****Chemical Stability:** Stable under normal storage and handling conditions.**Conditions to Avoid:** Avoid heat, sparks and other ignition sources**Incompatibility With Other Materials:** May react with strong oxidizing agents.**Hazardous Polymerization:** Will not occur.**Hazardous Decomposition Products:** None known.**SECTION 11 TOXICOLOGICAL INFORMATION****Acute Toxicity:**

Skin Absorption: LD50= >3160 mg/kg

Ingestion: LD50= >10000 mg/kg

Inhalation: minimal toxicity

Carcinogenicity:**NTP:** No**IARC:** No**OSHA:** No

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicity: Product is insoluble in water. Not expected to be harmful to aquatic organisms.

Biodegradability: Product is expected to be readily biodegradable

SECTION 13 DISPOSAL CONSIDERATIONS

New or used 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

SARA Title III Section 311/312 Reportable Hazard Categories: Fire Health

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.

Canada

Domestic Substances List: Listed

WHMIS Classification: Not controlled

International Inventories:

Australia (AICS)

China (IECS)

Europe (EINECS)

Japan (ENCS)

Korea (ECL)

Philippines (PICCS)

SECTION 16 OTHER INFORMATION

Recommended Use: Heat transfer agent

Date of Revision: 10/12/07

Reason for Revision: New

NFPA RATINGS: Health: 1 Flammability: 2 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. | TLV | | Threshold Limit Value |
| < | - | 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.