



## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Paratherm MR® 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 irritation and damage if mists are inhaled.

Water white liquid with minimal odor before use. May turn dark and develop slight chemical odor when product is used.

Combustible liquid.

### 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
Linear Alkene	68649-11-6	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. 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 breathing difficulties persist or if victim is unconscious, seek immediate medical attention.

#### SECTION 5 FIRE FIGHTING MEASURES

**Extinguishing Media:** Water fog, foam, dry chemical, or carbon dioxide (CO<sub>2</sub>) 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:** 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 (USA). 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.

**Handling:** This material is a static accumulator. Avoid generating mist.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits:** None 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) may be desirable. If material will be handled while hot, wear insulated clothing along with Viton 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:** 6.7 lb/gal @ 60°F (15.5 °C)

**Flashpoint:** > 300°F (149°C) Closed Cup

**Vapor Pressure:** <1mm @70F (21.1°C)

**Vapor Density (Air = 1):** >1

**Evaporation Rate (BuAc = 1):** <1

**Boiling Point:** >650°F (343°C)

**Solubility:** Insoluble in water.

**Pour Point:** <-65°F (-54°C)

## 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:

Skin Absorption: LD50= >2000 mg/kg (rabbit)

Ingestion: LD50= >2000 mg/kg (white rat)

Inhalation: LC50 <5, >2.5 mg/liter (white rat)

### Carcinogenicity:

**NTP:** No

**IARC:** No

**OSHA:** No

## SECTION 12 ECOLOGICAL INFORMATION

**Environmental Toxicity:** Product is insoluble in water and so is not expected to be toxic to aquatic organisms.

**Biodegradability:** Product is inherently 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:** Immediate 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:** 06/05/2009

**Reason for Revision:** Revise section 9

**NFPA RATINGS:**      Health: 1      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.	>	-	Greater Than
<	-	Less Than	>=	-	Greater Than or Equal To
<=	-	Less 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.