

Material Safety Data Sheet



Paratherm Corporation
Paratherm MG™ Military Grade
Heat Transfer Fluid

I. PRODUCT IDENTIFICATION

Manufacturer: Paratherm Corporation
Address: 4 Portland Road
West Conshohocken, PA 19428 USA
Trade Name: **Paratherm MG™**
Revision Date: October 06, 2007
Emergency Telephone No.: 610-941-4900
Chemtrec (USA): 800-424-9300
Chemtrec (outside USA): 703-527-3887

CAS Number: Proprietary Hydrocarbon
NFPA Hazard Identification
Degree of Hazard | Hazard Ratings
Health: 0 | 0—Least
Fire: 1 | 1—Slight
Reactivity: 0 | 2—Moderate
3—High
4—Extreme

II. INGREDIENTS

COMPONENT NAME	HAZARDOUS IN BLEND	PERCENTAGE	COMPONENT EXPOSURE LIMITS	UNITS
Hydrocarbon A	No	100	OSHA PEL ACGIH TLV	None established (see item III below) None established (see item III below)

III. HEALTH EFFECT INFORMATION

ACUTE EFFECTS

EYE CONTACT

May cause mild irritation on direct contact.

SKIN CONTACT

Paratherm MG heat transfer fluid is not expected to cause any skin irritation upon direct single or repeated and prolonged contact.

INHALATION

Caution should be taken to prevent aerosolization or misting.

INGESTION

Ingestion is non-toxic unless aspiration occurs. See Chronic Effects Section below.

CARCINOGENICITY

NTP: No IARC: No OSHA: No

CHRONIC EFFECTS

On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Aspiration may lead to chemical pneumonitis, which is characterized by pulmonary edema and hemorrhage, and may be fatal. Signs of lung involvement include increased respiration rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking, and gagging are often noted at the time of aspiration. Gastrointestinal discomfort may develop, followed by vomiting, with a further risk of aspiration.

IV. EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT

If fluid is hot, treat for thermal burns and take victim to hospital immediately.

SKIN CONTACT

If fluid is hot, submerge injured area in cold water. If victim is severely burned, take to a hospital immediately.

INHALATION

Paratherm MG heat transfer fluid has a low vapor pressure and is not expected to present an inhalation hazard at ambient

conditions. If vapor or mist is generated when the fluid is heated or handled, remove victim from exposure. If breathing has stopped or is irregular, administer artificial respiration and supply oxygen if it is available. If victim is unconscious, remove to fresh air and see medical attention. **Do not use compressed oxygen in hydrocarbon atmospheres.**

INGESTION

Do not induce vomiting. Drink plenty of water. Do not give anything to an unconscious victim. Seek medical attention immediately.

V. PERSONAL HEALTH PROTECTION INFORMATION

EYE PROTECTION

Eye protection is not required under conditions of normal use. If the fluid is handled such that it could be splashed into the eyes, wear plastic face shield or splash-proof safety goggles.

SKIN PROTECTION

No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious synthetic rubber clothing (boots, gloves, aprons, ect.). If handling hot fluid, use insulated protective clothing.

RESPIRATORY PROTECTION

Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the fluid is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. **Do not use compressed oxygen in hydrocarbon atmospheres.**

VENTILATION

If vapor or mist is generated when the fluid is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits.

VI. FIRE PROTECTION INFORMATION

FLASH POINT		300°F (149°C)	TEST METHOD ASTM D92
FLAMMABLE LIMITS IN AIR (% BY VOL).	LOWER	No data	
	UPPER	No data	

EXTINGUISHING MEDIA

Use dry chemical, foam, water fog, or carbon dioxide.

SPECIAL FIRE FIGHTING PROCEDURES

Water may be ineffective but can be used to cool containers exposed to heat or flame.

UNUSUAL FIRE AND EXPLOSIVE CONDITIONS

Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

VII. REACTIVITY DATA

STABILITY (THERMAL, LIGHT, ETC.)	Stable
INCOMPATIBILITY (MATERIALS TO AVOID)	May react with strong oxidizing agents
HAZARDOUS POLYMERIZATION	Will not occur
HAZARDOUS DECOMPOSITION PRODUCTS	If burned, will produce carbon dioxide and carbon monoxide
CONDITIONS TO AVOID	None

VIII. ENVIRONMENTAL PRECAUTIONS

STEPS TO BE TAKEN IF FLUID IS RELEASED OR SPILLED

Consult health effect information in Section III, Personal Health Protection Information in Section V, Fire Protection Information in Section VI, and Reactivity Data in Section VII. Notify appropriate authorities of spill. Contain spill immediately. Do not allow spill to enter sewers or watercourses; remove all sources of ignition. Absorb fluid with appropriate inert materials such as sand, clay, etc. Scoop up and remove. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

WASTE DISPOSAL METHOD

Disposal must comply with federal, state and local regulations. The fluid, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. **Caution:** If regulated solvents are used to clean up spilled fluid, the resulting waste mixture may be regulated. Department of Transportation (DOT) regulations may apply if material is spilled during transport. Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible. This material, as supplied, is not regulated by RCRA as hazardous waste.

IX. MISCELLANEOUS

HANDLING AND STORAGE REQUIREMENTS

Do not transfer to unmarked containers. Store in closed containers away from heat, sparks, open flame, or oxidizing materials. Paratherm **MG** heat transfer fluid is not classified as hazardous under DOT regulations. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106—Flammable and combustible liquids.

ADDITIONAL INFORMATION

SARA Title III: Paratherm **MG** is not subject to the reporting requirements of section 313 of Title III of the Superfund Amendment & Reauthorization Act of 1986, and 40 C.F.R. part 372.

RCRS Hazardous Waste Number and RCRA Hazardous Waste Classification: Not applicable.

TSCA Inventory Status: Ingredients listed.

SARA Toxic Chemical and SARA EHS: This product contains no chemical subjects to SARA Title III Section 313 supplier notification requirements.

SARA Title III, Sections 311 and 312: Not hazardous.

OSHA Regulations: This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

WHMIS Information: Not controlled.

Ecological Information: Discharge or spills that produce a visible sheen on either surface water, or in water-ways/sewers that lead to surface water, must be reported to the National Response Center at 800-424-8802.

Clean Air Act: Paratherm **MG** is not classified as a Hazardous Air Pollutant (HAP) under section 112 of the Clean Air Act.

X. PHYSICAL PROPERTIES

APPEARANCE	Clear Colorless	PERCENT VOLATILE	Nil @ Ambient Temperature
ODOR	Slight	VAPOR DENSITY (AIR=1)	exceeds 1.0
VAPOR PRESSURE	<0.1 mm Hg @ 70°F	EVAPORATION RATE (EE=1)	< 1.0
SOLUBILITY-WATER	Insoluble	TYPICAL SPECIFIC GRAVITY	0.8-0.82 @ 60°F

XI. SHIPPING INFORMATION

Not regulated by D.O.T., no placarding required.

NOTE: The information and recommendations in this literature are made in good faith and are believed to be correct as of the below date. You, the user, or specifier, should independently determine the suitability and fitness of Paratherm heat transfer fluids for use in your specific application. We warrant that the fluids conform to the specifications in Paratherm literature. Because our assistance is furnished without charge, and because we have no control over the fluid's end use or the conditions under which it will be used, we make

no other warranties — expressed or implied, including the warranties of merchantability or fitness for a particular use or purpose (recommendations in this bulletin are not intended nor should be construed as approval to infringe on any existing patent). The user's exclusive remedy, and Paratherm's sole liability is limited to refund of the purchase price or replacement of any product proven to be otherwise than as warranted. Paratherm Corporation will not be liable for incidental or consequential damages of any kind.

