



I. PRODUCT IDENTIFICATION

Manufacturer's Name	Paratherm Corporation
Address	4 Portland Road West Conshohocken, PA 19428 USA
Trade Name	Paratherm CR™ Heat Transfer Fluid
Revision Date	July 1, 2004
Emergency Telephone No.	610-941-4900
Chemtrec (USA)	800-424-9300
Chemtrec (Outside USA)	703-527-3887

Hazard Identification HMIS	
Health: 2	Hazard Ratings
Fire: 2	0—Least
Reactivity: 0	1—Slight
	2—Moderate
PPE: B*	3—High
*See section V	4—Extreme

II. INGREDIENTS

COMPONENT NAME	HAZARDOUS IN BLEND	PERCENTAGE		TLV (PPM)
Synthetic Hydrocarbon Solution	No	Proprietary	OSHA PEL ACGIH TLV	Not Established Not Established
Proprietary Diluent	No	Proprietary	OSHA PEL ACGIH TLV	Not Established Not Established

III. HEALTH EFFECT INFORMATION

ACUTE EFFECTS

EYE CONTACT

Slightly irritating, may cause tearing, redness, and blurred vision. Conjunctivitis is possible with continuous exposure.

SKIN CONTACT

May cause irritation, reddening, drying, itching, and cracking. Systemic toxicity is possible with continuous exposure.

INHALATION

May cause irritation and burning. May cause central nervous system depression such as drowsiness, dizziness, fatigue, and blurred vision. Extreme exposures may result in unconsciousness, coma, respiratory arrest, and possible death.

INGESTION

May cause irritation, nausea, vomiting, diarrhea, and central nervous system depression. Aspiration into the lungs may result in severe injury.

IV. EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT

Immediately flush eyes with large amounts of cool water and continue flushing until irritation subsides. If irritation does not go away seek medical attention.

SKIN CONTACT

Wash exposed areas with warm water and soap. Promptly remove contaminated clothing (launder before reuse). Get medical attention if irritation persists.

INHALATION

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION

Aspiration into the lungs may cause severe injury and/or death. Do not induce vomiting. Give milk or water to drink. Get medical attention immediately.

V. PERSONAL HEALTH PROTECTION INFORMATION

EYE PROTECTION

Wear plastic face shield or splash-proof chemical safety goggles with side shields.

SKIN PROTECTION

Do not allow contact with skin. Wear chemical resistant gloves and long sleeves and body suits to minimize skin contact. Use good personal hygiene practices before and after fluid handling. To decrease possibility of skin exposure, wear impervious clothing and boots.

RESPIRATORY PROTECTION

If vapor mist is generated use a NIOSH certified respirator for organic vapors.

VENTILATION

Utilize local exhaust to control vapors. Do not rely on general exhaust. In poorly ventilated areas wear NIOSH approved respiratory equipment.

PPE Information: General handling of this product only requires a PPE classification of B, gloves and protective eyewear.

VI. FIRE PROTECTION INFORMATION

FLASHPOINT (ASTM, TCC D-56) >43°C (>110°F)

FLAMMABLE LIMITS IN AIR (% BY VOL) UPPER: <7.0
LOWER: <0.9

EXTINGUISHING MEDIA

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

SPECIAL FIRE FIGHTING PROCEDURES

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product. Cool containers with water to prevent rupture if unable to move container from fire area.

UNUSUAL FIRE AND EXPLOSIVE CONDITIONS

This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

ELECTROSTATIC ACCUMULATION HAZARD

Material can accumulate static charges that can cause an incendiary electrical discharge. Use proper bonding and/or grounding procedure.

VII. REACTIVITY DATA

STABILITY (THERMAL, LIGHT, ETC.):	Stable
CONDITIONS TO AVOID INSTABILITY:	Incompatibles and sources of ignition
HAZARDOUS POLYMERIZATION:	Will not occur
CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION:	Not Applicable
MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of carbon

VIII. ENVIRONMENTAL PRECAUTIONS

STEPS TO BE TAKEN IF FLUID IS RELEASED OR SPILLED

Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. 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. Prevent liquid from entering sewers, watercourses, or low areas because runoff from fire control or dilution water may cause pollution or create a fire or explosion hazard. Dike far ahead of liquid spill for later disposal. Water spray may reduce vapor; but may not prevent ignition in closed spaces. Absorb fluid with appropriate inert materials such as sand, clay, activated charcoal absorbent, dry lime, soda ash, etc., and place in covered containers for disposal. Recover by pumping (use an explosion proof or

hand pump) or with a suitable absorbent. Ventilate and wash area after clean up is complete. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. For large spills and fires immediately call your local fire department.

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.

IX. MISCELLANEOUS

HANDLING AND STORAGE REQUIREMENTS

Store in closed containers away from heat, sparks, open flame, or oxidizing materials. Protect material from direct sunlight. Material will accumulate static charges that may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Empty product containers may contain product residue. Do not reuse empty containers without commercial cleaning or reconditioning. Do not pressurize, cut, heat, or weld empty containers. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA and OSHA 1910.120 (q)—Flammable and combustible liquids.

ADDITIONAL INFORMATION

RCRA 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 subject to SARA Title III Section 313 supplier notification requirements.

SARA Title III, Sections 311 and 312: An immediate health hazard, a delayed health hazard, and a fire hazard.

OSHA Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

WHMIS Information: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is: B3 – combustible liquid with a flash point between 37.8°C and 93.3°C D2B – eye or skin irritant.

Ecological Information: A component of Paratherm CR is classified as toxic to aquatic organisms. Long-term adverse effects in the aquatic environment are possible because of slow biodegradation. Discharge or spills that produce a visible sheen on either surface water, or in waterways/sewers that lead to surface water, must be reported to the National Response Center at 800-424-8802.

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

X. PHYSICAL PROPERTIES

BOILING POINT	142°C (288°F)	PERCENT VOLATILE	<10% @ Ambient Temperature
POUR POINT	<-120°C (<-184°F)	VAPOR DENSITY (AIR=1)	>1
APPEARANCE	Clear Colorless Liquid	EVAPORATION RATE (BUAC=1)	<1
ODOR	Faint Odor	TYPICAL SPECIFIC GRAVITY	0.81-0.84 @ 15.6°C
VAPOR PRESSURE	<5mmHg @ 20°C	COLOR	Clear, Colorless
SOLUBILITY-WATER, 25°C	<0.1%		

XI. SHIPPING INFORMATION

US DOT Shipping Name: Hydrocarbons, Liquid, n.o.s., 3, UN 3295, PG III
US DOT/IMDG Hazard Class: Class 3 – Flammable Liquid, PG III

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

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