



I. PRODUCT IDENTIFICATION

Manufacturer's Name	Paratherm Corporation
Address	1050 Colwell Road Conshohocken, PA 19428 USA
Trade Name	Paratherm NF®
Revision Date	May 15, 2001
Emergency Telephone No.	610-941-4900
Chemtrec (USA)	800-424-9300
Chemtrec (outside USA)	703-527-3887

CAS Number: 8042-47-5	
TSCA Inventory Status: Included	
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	CAS NUMBER	HAZARDOUS IN BLEND	PERCENTAGE Min. Max.	COMPONENT EXPOSURE LIMITS	UNITS
Hydrotreated Natural Hydrocarbon	8042-47-5	No	100.00	OSHA PEL ACGIH TLV	None established None established

III. HEALTH EFFECT INFORMATION

ACUTE EFFECTS

EYE CONTACT

Paratherm NF® is non-irritating to the eyes upon direct contact.

SKIN CONTACT

Paratherm NF® 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 relatively non-toxic unless aspiration occurs. See Chronic Effects.

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.

CARCINOGENICITY

NTP: No
IARC: No
OSHA: No

IV. EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT

Immediately flush eyes with large amounts of water and continue flushing for 15 minutes. If fluid is hot, treat for thermal burns and take victim to hospital immediately.

SKIN CONTACT

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

INHALATION

Paratherm NF® 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 seek medical attention. **Do not use compressed oxygen in hydrocarbon atmospheres.**

INGESTION

May act as a laxative. Do not induce vomiting due to possible aspiration. If vomiting occurs, lower head below knees to avoid aspiration. Seek immediate medical attention.

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 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, etc.) over parts of the body subject to exposure. If handling hot fluid, use insulated protective clothing (boots, gloves, aprons, etc.)

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.

OTHER

Consumption of food and beverages should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking or smoking.

VI. FIRE PROTECTION INFORMATION

FLASH POINT	345°F (174°C)	TEST METHOD	ASTM D-92 (COC)
FLASH POINT	335°F (169°C)	TEST METHOD	ASTM D-93 (PMCC)
FIRE POINT	385°F (196°C)	TEST METHOD	ASTM D-92 (COC)
AUTOIGNITION TEMPERATURE	690°F (366°C)	TEST METHOD	ASTM D-2155
AUTOIGNITION TEMPERATURE	691°F (367°C)	TEST METHOD	ASTM E-659-78

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. Caution should be exercised when using water or foam

as frothing may occur, especially if sprayed into containers of hot, burning liquid.

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

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): May react with strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: If burned, will produce carbon dioxide and carbon monoxide

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 release. Contain release immediately. Do not allow release to enter sewers or watercourses; remove all sources of ignition. Absorb with appropriate inert materials such as sand, clay, etc. Large releases may be picked up using vacuum pumps, shovels, buckets or other means and placed in drums or other suitable containers.

WASTE DISPOSAL METHOD

All disposals 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 for transporting this material when spilled. 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 NF® 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 NF® 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.

WHMIS CLASSIFICATION

Not controlled.

X. PHYSICAL PROPERTIES

BOILING POINT 646°F, 347°C (10% fraction)

MELTING POINT Not applicable

APPEARANCE Clear liquid

ODOR Odorless

VAPOR PRESSURE <1 mm Hg @ 70°F

SOLUBILITY Negligible in water. Soluble in hydrocarbons.

PERCENT VOLATILE Nil @ Ambient Temperature

VAPOR DENSITY (AIR=1) >1

EVAPORATION RATE (EE=1) <1

TYPICAL SPECIFIC GRAVITY Approx. 0.8734 @ 25/25 C

MOLECULAR WEIGHT Average Molecular Weight = 350

XI. SHIPPING INFORMATION

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

NOTE: We present the information and recommendations in this bulletin in good faith and believe them to be correct, however, Paratherm Corporation makes no representations as to accuracy or completeness. We supply this information on the condition that the user determine suitability of product

for each specific application. We warrant that the heat transfer fluid conforms to the specifications in this bulletin, but make no further warranty, expressed or implied, including the warranties of merchantability or fitness for a particular purpose.