

DURATHERM 450

MATERIAL SAFETY DATA SHEET

Emergency Phone Number: 800-446-4910

Date : Dec 15, 2003

SECTION 1

Company Name: Frontier Resource and Recovery Services, Inc.
Address: P.O. Box 563, Lewiston, NY 14092
Phone / Fax: 800-446-4910 / 905-984-6684
Trade Name: Duratherm High Temperature Heat Transfer Fluid
Chemical Name: Paraffinic Hydrocarbon
Chemical Family: Paraffinci Hydrocarbon
Formula: Proprietary
CAS#: Proprietary
Applications: Duratherm High Temperature Heat Transfer Fluid is for use as a heat transfer fluid in various applications.

COMPANY IDENTIFICATION AND CHEMICAL PRODUCT

SECTION 2

General: This Product is Non-Hazardous. The product contains No Known Carcinogens. No special warning labels are required under OSHA 29 CFR 1910.1200.

FDA Statement: N/A

COMPOSITION / INFORMATION ON INGREDIENTS

SECTION 3

Appearance: Clear liquid,
Known Hazards: This product does not require any special warning labels under OSHA 29 CFR 1910.1200, and contains no known hazardous ingredients.

HAZARDS IDENTIFICATION

SECTION 4

Eyes: Flush with clean, lukewarm water (low pressure) occasionally lifting eyelids. Physician assessment if eyes are inflamed.
Skin: Wash affected areas thoroughly with soap and water. Wash contaminated clothing before reuse.
Inhalation: Avoid breathing oil mists. Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given by qualified personnel if breathing is difficult. Get medical attention.
Ingestion: Do not induce vomiting. Force fluid. Has laxative effect.

FIRST AID MEASURES

SECTION 5

Flash Point: 300 °F min
Flammable Limits: N/A
Auto Ignition Temp: N/A
Fire & Explosion Hazards: LOW FIRE HAZARD - Do not cut, drill, or weld empty containers
Extinguishing Media: Dry chemical foam, water spray, carbon dioxide for small fires
Fire Fighting Procedures: Contain liquid, cover with extinguishing agent, use water spray to cool fire exposed containers & as protective screen. Do not point solid water stream directly into burning fluid to avoid spreading.

FIRE FIGHTING MEASURES

SECTION 6

Spill or Leak: Contain spill, absorb with inert absorbants such as dry clay, sand, or diatomaceous earth, commercial absorbants, or recover using pumps. Scoop up used absorbants into appropriate receptacles.
Waste Disposal: Dispose in approved, secure landfill site or through a licensed waste reclaimer.

ACCIDENTAL RELEASE MEASURES

SECTION 7

Storage Temp - min / max:
Shelf Life:
Precautions:

HANDLING AND STORAGE

None / 104 °F Recommended.
Indefinite in original container
Not for internal use. Avoid contact with skin, eyes, and clothing.

SECTION 8

Eye Protection:
Skin Protection:
Respiratory Protection:

EXPOSURE CONTROL / PERSONAL PROTECTION

Normally none required, chemical goggles if splashing is likely or high pressure systems are used.
Normally none required, for direct contact of more than 2 hours, Viton or Nitrile is recommended.
Normally not necessary. If mist is generated, wear approved organic vapor respirator suitable for oil mist areas with sufficient oxygen.

Ventilation:
Exposure Limits:

General ventilation.
Acute LD₅₀ > 5000 mg/Kg (rat, Oral) Practically Non-Toxic

SECTION 9

Appearance:
Boiling Point:
Vapor Pressure:
Specific Gravity:
Volatilities, % Volume
Odor:
Solubility in Water:
Evaporation Rate:
Viscosity:

PHYSICAL AND CHEMICAL PROPERTIES

Clear liquid
>470 °F
<0.003 kPa @ 25 °C
0.84 - 0.92
0%
Very Slight Hydrocarbon Odor
Negligible
Nil
@40 °C varies depending on grade.

SECTION 10

Stability:
Hazardous Polymerization:
Incompatibilities:
Decomposition Products:

REACTIVITY

Product is stable
Will not occur
Strong oxidizers
Analogous compounds evolve, carbon monoxide, carbon dioxide, and other undefined fragments when burned.

SECTION 11

General:

TOXICOLOGICAL INFORMATION

Acute LD₅₀ > 5000 mg/Kg (rat, Oral) Practically Non-Toxic. Negative when tested by modified Ames Test For Carcinogenicity

SECTION 12

General:

ECOLOGICAL INFORMATION

No data available

SECTION 13

Waste Disposal:

DISPOSAL CONSIDERATIONS

Used product must be disposed of in accordance with Federal, State, and Local environmental control regulations. Incineration is preferred.
DO NOT HEAT OR CUT EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

SECTION 14

Technical Name:
D.O.T. Hazard Class:
U.N. / N.A. #
Product Label:

TRANSPORTATION INFORMATION

Paraffinic Hydrocarbon
Not Regulated
Not Regulated
Duratherm High Temperature Heat Transfer Fluid

SECTION 15

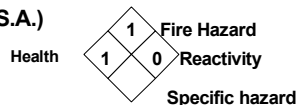
OSHA STATUS:
TSCA STATUS:
RCRA STATUS:

REGULATORY INFORMATION

Not hazardous under 29 CFR 1910.1200.
All components in this formulation are listed on the TSCA Inventory.
If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, it is the responsibility of the product user to determine at the time of disposal, whether the material being disposed of is a hazardous waste. (40 CFR 261.20-24)

HMIS(U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	B

NFPA (U.S.A.)

Rating 0 Insignificant
1 Slight
2 Moderate
3 High
4 Extreme

SECTION 16

General:

OTHER INFORMATION

This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of Frontier Resource and Recovery Services, Inc.. The data on this sheet related only to the specific material designed herein. Frontier Resource and Recovery Services, Inc. assumes no legal responsibility for the use or reliance upon these data.