

U-CLEAN

MATERIAL SAFETY DATA SHEET

Emergency Phone Number: 800-446-4910

Date : April 1, 2007

SECTION 1

Company Name:
Address:
Phone / Fax:
Trade Name:
Chemical Name:
Chemical Family:
Formula:
CAS#:
Applications:

COMPANY IDENTIFICATION AND CHEMICAL PRODUCT

Frontier Resource and Recovery Services, Inc.
P.O. Box 563, Lewiston, NY 14092
800-446-4910 / 905-984-6684
U-Clean
Polyalkylene Glycol & Cleaners
Polyalkylene Glycol & Cleaners
Proprietary
Proprietary
U-Clean is used as a system cleaner and long-term heat transfer fluid.

SECTION 2

General:

COMPOSITION / INFORMATION ON INGREDIENTS

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.

SECTION 3

Appearance:

HAZARDS IDENTIFICATION
Clear Liquid, Yellow Tint

Known Hazards:

This product does not require any special warning labels under OSHA 29 CFR 1910.1200 and contains no known hazardous ingredients.

SECTION 4

Eyes:

FIRST AID MEASURES
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.

SECTION 5

Flash Point:

FIRE FIGHTING MEASURES
455 °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.

SECTION 6

Spill or Leak:

ACCIDENTAL RELEASE MEASURES

Contain spill, absorb with inert absorbant such as dry clay, sand, or diatomaceous earth, commercial sorbants 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.

SECTION 7

HANDLING AND STORAGE

Storage Temp - min / max: None/ 104 °F recommended
Shelf Life: Indefinite in original container
Precautions: Not for internal use. Avoid contact with skin, eyes, and clothing.

SECTION 8

EXPOSURE CONTROL / PERSONAL PROTECTION

Eye Protection: Normally none Required, Chemical goggles if splashing is likely or high pressure systems are used.
Skin Protection: For direct contact of more than 2 hours, PVC, Viton, or Nitrile gloves are recommended.
Respiratory Protection: Normally not necessary. If mist is generated, wear approved organic vapor respirator suitable for oil mist areas with sufficient oxygen.
Ventilation: General ventilation.
Exposure Limits: Acute LD₅₀ > 5000 mg/Kg (rat:Oral) Practically Non Toxic

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear Liquid, Yellow Tint
Boiling Point: >570 °F
Vapor Pressure: <0.001 kPa @25 °C
Specific Gravity: 0.85-0.95
Volatilities, % Volume: 0%
Odor: Hydrocarbon Odor
Solubility in Water: Negligible
Evaporation Rate: Nil
Viscosity: @40°C Varies Depending on grade

SECTION 10

REACTIVITY

Stability: Product is stable
Hazardous Polymerization: Will not occur
Incompatibilities: Strong oxidizers
Decomposition Products: Analogous compounds evolve, carbon monoxide, carbon dioxide, and other undefined fragments when burned.

SECTION 11

TOXICOLOGICAL INFORMATION

General: Acute LD₅₀ > 5000 mg/Kg (rat,oral) Negative when tested by modified Ames Test for Carcinogenicity

SECTION 12

ECOLOGICAL INFORMATION

General: N / A

SECTION 13

DISPOSAL CONSIDERATIONS

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

SECTION 14

TRANSPORTATION INFORMATION

Technical Name: Polyalkylene Glycol / Esters & Cleaners
D.O.T. Hazard Class: Not Regulated
U.N. / N.A. #: Not Regulated
Product Label: U-Clean

SECTION 15

REGULATORY INFORMATION

OSHA STATUS: Not hazardous under 29 CFR 1910.1200.
TSCA STATUS: All components in this formulation are listed on the TSCA Inventory.
RCRA STATUS: 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

OTHER INFORMATION

General: 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.