



1. CHEMICAL IDENTIFICATION

PRODUCT NAME: DEFOAMER
CHEMICAL FAMILY: POLYETHER POLYOL
CHEMICAL NAME: POLYOL
PRODUCT USE: OIL & GAS DRILLING

COMPANY IDENTIFICATION
MOUNTAIN SUPPLY & SERVICE, LLC
P.O. BOX 3111 LONGVIEW, TX 75601

EMERGENCY TELEPHONE NUMBER: CHEMTEL: 800-255-3924

2. HAZARDOUS INGREDIENTS

PHYSICAL STATE: Liquid
COLOR: Light to dark amber
ODOR: Mild
OSHA STATUS: This material is considered a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard 29 CFR 1910.1200

Skin Irritation: CAT 2 Eye Irritation: CAT 2 Acute Toxicity: CAT 4 Oral

HAZARDS

DANGER! Causes skin, eye irritation & burns and respiratory irritation. May be harmful if swallowed. Do not ingest. Avoid breathing vapor or mist. Keep upwind of spill.



PRECAUTIONARY STATEMENTS

EYE: May cause severe eye irritation or burns with corneal injury which may result in permanent impairment of vision, even blindness.
SKIN CONTACT & ABSORPTION: Brief contact may cause skin irritation or severe burns. May cause allergic skin reaction in susceptible individuals. Contact with heated material may cause thermal burns. Prolonged skin contact is unlikely to result in absorptions of harmful amounts. Repeated skin contact may result in absorption of harmful amounts.
INGESTION: Single dose oral toxicity is considered to be low. Amounts ingested incidental to industrial handling are not likely to cause injury however, ingestion of larger amounts may cause injury or adverse health effects. Swallowing may result in burns of the mouth and throat or may result in gastrointestinal irritation or ulceration.
INHALATION: At room temperatures, vapors are minimal due to low volatility. A single exposure is not likely to be hazardous. If material is heated or aerosol/mist is produced, concentrations may be attained that are sufficient to cause respiratory irritation and other serious effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product contains a mixture of polyether polyols (ethylene & propylene based).

INGREDIENT	CAS #	WT. %
*Proprietary Ingredients	*Proprietary	100%

**Composition/specific chemical identities are withheld as trade secret under provisions of OSHA Hazard Communication Standard 29 CFR 1910.1200*

4. FIRST AID MEASURES

EYES: Irrigate immediately with water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue to flush with water. Seek medical attention if irritation persists.

SKIN: Wash off immediately with soap & water in flowing water or shower for at least 15 minutes. Remove contaminated clothing. Seek medical attention if irritation persists.

INGESTION: Do not induce vomiting. Rinse out mouth. Consult medical personnel or POISON CENTER.

INHALATION: Remove to fresh air. If effects occur, consult medical personnel.



5. FIREFIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog, CO₂ dry chemical and foam. Alcohol resistant foams (ATC type) are preferred. DO NOT USE direct water spray which may cause violent frothing and spread fire.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective firefighting clothing.

HAZARDOUS COMBUSTION PRODUCTS: During a fire the smoke may contain the original material in addition to combustion products of varying composition which may be toxic or irritating. Combustion products may include but are not limited to: Carbon monoxide, Carbon dioxide.

UNUSUAL FIRE & EXPLOSION HAZARDS: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONARY MEASURES: Isolate and restrict area. Keep unnecessary and unprotected personnel from entering area. Spilled material may cause a slipping hazard. Use appropriate safety equipment. Keep upwind of spill. Ventilate area of spill or leak.

ENVIRONMENTAL PRECAUTIONS: Prevent from entering soil, ditches, sewers, waterways and/or groundwater. Consult local authorities.

METHODS FOR CONTAINMENT/CLEAN-UP: Contain spilled material if possible. Collect with non-combustible absorbent material such as dirt, sand, sawdust and place in suitable and properly labeled containers.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid contact with eyes, skin and clothing. Do not swallow. Wear safety glasses with side shields, OSHA standard goggles or face shield. Contact with heated material may cause thermal burns. Avoid breathing vapors or mist if generated. Use with adequate ventilation. Wash thoroughly with soap and water immediately after handling.

STORAGE: Avoid prolonged exposure to extreme heat and air. Store in cool dry place. Store in following materials: carbon steel, stainless steel, polypropylene, polyethylene-lined container, Teflon, glass-lined container, aluminum. Storage period is 24 months steel drums, 6 months bulk.

OTHER PRECAUTIONS: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

INGREDIENT	LIST	TYPE	VALUE
Polypropylene glycol	AIHA Weel	TWA Aerosol	10 mg/m ³
Poly(ethylene oxide)	AIHA Weel	TWA Particulate	10 mg/m ³
Ethylene Glycol	ACGIH	Aerosol	100 mg/m ³
Ethylene Glycol monophenyl ether	DOW IHG	TWA	5 ppm SKIN
Potassium hydroxide	ACGIH	Ceiling	2 mg/m ³
Sodium hydroxide	ACGIH	Ceiling	2 mg/m ³
	OSHA Z-1	PEL	2 mg/m ³



8. EXPOSURE CONTROLS/PERSONAL PROTECTION CONT'D

ENGINEERING CONTROLS / VENTILATION: Provide general ventilation to control airborne levels below the exposure guidelines. Local exhaust & ventilation may be necessary for enclosed operations. If material is heated or sprayed, use approved air-purifying respirators.

EYE/FACE PROTECTION: Use safety glasses with side shields or OSHA standard goggles. Use face shield if splash hazard exists or when handling heated material.

SKIN PROTECTION: Use clean body-covering clothing to ensure skin contact does not occur.

HAND PROTECTION: Use chemically resistant gloves when prolonged or frequently repeated contact could occur.

RESPIRATORY PROTECTION: Respiratory equipment should be worn when there is a potential to exceed the exposure limits or guidelines. The following should be effective types of air purifying respirators: organic vapor cartridge with particulate pre-filter.

HYGENE PRACTICES: Wash hands, forearms and face after handling material and before eating. Wash contaminated clothing before re-use. Wash contaminated areas with soap and water. Flush thoroughly with water.

OTHER PRECAUTIONS: Ensure that eyewash stations and safety showers are in the area.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Liquid
COLOR:	light to dark amber
ODOR:	Mild
ODOR THRESHOLD:	Not available
pH:	7-11
MELTING POINT:	Not available
FREEZING:	Not available
BOILING POINT:	Decomposes prior to boiling
FLASH POINT:	≥110 °C (230 – 550° F), ASTM D93 Closed Cup
EVAPORATION RATE:	Not available
FLAMABILITY (solids, gas):	Not applicable to liquids
FLAMABILITY (air):	LOWER – not availableUPPER – not available
EXPLOSIVE PROPERTIES:	Not Available
VAP PRESS:	Expected to be low
VAP DENSITY:	> Air
RELATIVE DENSITY:	Not Available
SOL IN WATER:	Slightly soluble to completely soluble
SP GRAVITY:	1.02-1.09
PARTITION COEFFICIENT:	Not Available
AUTOIGNITION TEMP:	Not Available
DECOMPOSITION TEMP:	Not Available
VISCOSITY:	Varies

10. STABILITY AND REACTIVITY

REACTIVITY: No data available.

CHEMICAL STABILITY: Stable under typical use, storage & temperature conditions.

INCOMPATIBLE MATERIALS: Oxidizing materials, strong acids and strong bases. Avoid unintended contact with isocyanates.

HAZARDOUS DECOMPOSITION: Decomposition products depend upon temperature, air supply & pressure of other materials and can include but are not limited to Carbon Dioxide, Carbon Monoxide, Alcohols, Aldehydes, Ethers, Hydrocarbons, Ketones, Polymer Fragments and Organic Acids.

HAZARDOUS POLYMERIZATION: Will not occur under normal use & storage conditions.

CONDITIONS TO AVOID: Material oxidizes at elevated temperatures. Do not distill to dryness. Generation of gas during decomposition can cause pressure in closed systems.



11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: May cause severe eye irritation or burns with corneal injury which may result in permanent impairment of vision, even blindness.

SKIN EFFECTS: Brief exposure may cause skin irritation or severe burns. Prolonged skin contact is unlikely to result in absorptions of harmful amounts. Repeated skin contact may result in absorption of harmful amounts.

INHALATION EFFECTS: At room temperature, vapors are minimal due to low volatility. Vapor from heated material or mist/aerosol spray may be hazardous on single exposure. Mist may cause severe irritation of upper respiratory tract (nose & throat). Prolonged exposure to mist/aerosol may cause serious adverse effects, even death.

INGESTION EFFECTS: Single dose oral toxicity is considered to be low. Amounts ingested incidental to industrial handling are not likely to cause injury however, ingestion of larger amounts may cause injury or adverse health effects. Swallowing may result in burns of the mouth and throat or may result in gastrointestinal irritation or ulceration.

TOXICITY

ORAL TOXICITY: As a product specific LD50 has not been determined.

DERMAL TOXICITY: As a product specific LD50 has not been determined.

INHALATION TOXICITY: As a product specific LD50 has not been determined.

SENSITIZATION: Did not cause allergic skin reactions when tested in humans and guinea pigs.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (Single Exposure): Evaluation of available data suggests that this material is not an STOT-SE toxicant.

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (Repeated Exposure): Contains component(s) which have been reported to cause effects on the following organs in animals: blood, kidney, liver, thyroid, respiratory tract & testes. Exposure to high concentrations of mist/aerosol spray may be associated with delayed lung damage.

CARCINOGENICITY: No specific, relevant data available for assessment.

TERATOGENICITY: Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother.

REPRODUCTIVE TOXICITY: Contains component(s) which did not interfere with reproduction in animal studies.

MUTAGENICITY: In vitro genetic toxicity studies were negative for component(s) tested. Genetic toxicity studies in animals were negative for component(s) tested.

ASPIRATION HAZARD: Aspiration in to the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

12. ECOLOGICAL INFORMATION

TOXICITY: Material is slightly toxic to aquatic organisms on an acute basis. Material should be tested for specific ecological impacts.

MOBILITY: No relevant data found.

PERSISTENCE/DEGRADABILITY: Most polyols are expected to degrade slowly in the environment.

BIOACCUMULATION: No bioconcentration is expected because of the relatively low molecular weight (MW greater than 1000).

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with all federal, state/provincial, and local laws and regulations DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. State/provincial and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. AS SUPPLIER, WE HAVE NO CONTROL OVER THE MANUFACTURING OR MANAGMENET PRACTICES OF PARTIES HANDLING THIS MATERIAL. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. WASTE CHARACTERIZATION AND DISPOSAL COMPLIANCE ARE THE RESPONSIBILITY SOLELY OF THE PARTY GENERATING THE WASTE OR DECIDING TO DISCARD OR DISPOSE OF THE MATERIAL.

14. TRANSPORT INFORMATION

DOT: Not Regulated

IMO/IMDG: Not Regulated

ICOA / IATA: Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this material. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to transportation.



15. REGULATORY INFORMATION

(Not meant to be all inclusive - selected regulations represented. Consult Federal, State or local regulations for specific requirements)

OSHA HAZARDOUS COMMUNICATION STANDARD:

This material is considered a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard 29 CFR 1910.1200.

SARA TITLE III SECTION 311/312 (40 CFR 370) HAZARD CATEGORIES:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Acute Health Hazard
Chronic Health Hazard

SARA TITLE III SECTION 313 (40 CFR 370) HAZARD CATEGORIES:

This material contains the following substances which are subject to the reporting requirements under this section:

COMPONENT

*Glycol Ethers

CAS

Not Available

US TOXIC SUBSTANCES CONTROL ACT (TSCA):

All components of this material are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

DOMESTIC SUBSTANCES LIST (DSL):

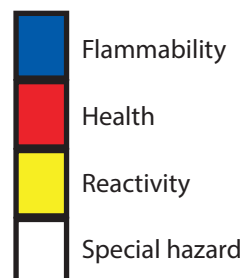
All components are either exempt or listed on the DSL.

16. OTHER INFORMATION

WHMIS Hazard Class: D2B Skin/eye irritant, Corrosive

NFPA Information:

Health Hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0



SPECIAL NOTICE

The information in this SDS pertains only to the product as shipped. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.