



MATERIAL SAFETY DATA SHEET

Trade Name: Aphronizer A™

Revision Date: 22-Dec-09

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Aphronizer A™
Chemical Family: Mixture
Applications: Oil well drilling fluid additive
Emergency Telephone (24 hr.): (ChemTrec) 800-424-9300
Supplied by: HiTech Fluid Systems Ltd.
1800, 505 - 3rd Street S.W.
Calgary, AB T2P 3E6
Tel: 403.547.2906
Fax: 403.547.3129
www.hitechfluid.com

Revision Number: 5

HMIS Rating
Health: 2 **Flammability:** 1 **Physical Hazard:** 0 **PPE:** E

HMIS Key: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. *Chronic effects - See Section 11. See Section 8 for Personal Protective Equipment recommendations.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS No.	Wt. %	Ingredient Comments
Alkyl ether sulfate, amine salt		60 - 100	No comments
Propylene Glycol	57-55-6	5 - 10	No comments
Alkoxylated alcohol		1 - 5	No comments
Water	7732-18-5	1 - 5	No comments

3. HAZARDS IDENTIFICATION

Emergency Overview: Warning! May cause severe eye irritation. May cause skin and respiratory tract irritation.

Canadian Regulations:
UN PIN No.: Not regulated **WHMIS Class:** D2B

Physical State: Liquid **Odor:** Mild **Color:** Yellow

Potential Health Effects:

Acute Effects

Eye Contact: May cause severe eye irritation.
Skin Contact: May be irritating to the skin.
Inhalation: Vapor or mists may be irritating to the respiratory tract.
Ingestion: May be harmful if swallowed.

Carcinogenicity & Chronic Effects: See Section 11 – Toxicological Information

Routes of Exposure: Eyes. Dermal (skin) contact. Inhalation.

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Target Organs: Eyes, Skin, Respiratory system

Medical Conditions Aggravated by Exposure: Skin. Respiratory

4. FIRST AID MEASURES

Eye Contact: Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Skin Contact: Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if any discomfort continues.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Dilute with 2 - 3 glasses of water or milk, if conscious. Never give anything by mouth to an unconscious person. If signs of irritation or toxicity occur seek medical attention.

General Notes: Persons seeking medical attention should carry a copy of this MSDS with them.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: F (C): >200F (>93C)
Flash Point Method: PMCC

Flammable Limits in Air - Lower (%): ND
Flammable Limits in Air - Upper (%): ND

Autoignition Temperature: F(C) ND
Flammability Class: IIIB
Other Flammable Properties: ND
Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and waterways.

Hazardous Combustion Products: Oxides of: Sulfur. Carbon. Nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment identified in Section 8.

Spill Procedures: Evacuate surrounding area, if necessary. Keep personnel removed and upwind of spill. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Shut off leak if it can be done safely. Contain spilled material. Absorb in vermiculite, dry sand or earth. Place into containers for disposal.

Environmental Precautions: Do not allow to enter sewer or surface and subsurface waters. Waste must be disposed of in accordance with federal, state and local laws. In the U.S., for products with reportable quantity (RQ) components - if the RQ is exceeded, report to National Spill Response Office at 1 800 424 8802.

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7. HANDLING AND STORAGE

Handling: Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid breathing vapors or spray mists. Use only in a well ventilated area. Wash thoroughly after handling.

Storage: Store in dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits

Ingredient	CAS NO:	Wt. %	ACGIH TLV TWA	OSHA PEL TWA	Other	Notes
Alkoxylated alcohol		1 - 5	Not Listed	Not Listed		None
Water	7732-18-5	1 - 5	Not Listed	Not Listed		None
Alkyl ether sulfate, amine salt		60 - 100	Not Listed	Not Listed		None
Propylene Glycol	57-55-6	5 - 10	Not Listed	Not Listed	AIHA WEEL: 50 ppm (total); 10 mg/m ³ (aerosol)	None

Engineering Controls: Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

Personal Protection Equipment

Eye/Face Protection: Wear chemical safety goggles.

Skin Protection: Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear chemical resistant gloves such as nitrile or neoprene.

Respiratory Protection: All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.

If exposed to airborne mist/aerosol of this product: Use at least a NIOSH-approved N95 half-mask disposable or re-usable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or reusable particulate respirator.

If exposed to vapors: Use a NIOSH/ MSHA-approved organic vapor respirator.

General Hygiene Considerations: Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded, if contaminated with product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Yellow
Odor: Mild
Physical State: Liquid
pH: 7 - 8 (100 g/l)
Vapor Pressure: ND
Vapor Density (Air=1): ND
Boiling Point: ND
Melting/Freezing Point: ND
Solubility (Water): Soluble
Specific Gravity (H₂O = 1): 1.06 at 77F (25C)
Evaporation Rate: ND
Odor Threshold(s): ND

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10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Conditions to Avoid: Keep away from heat, sparks and flame.
Materials to Avoid: Bases. Oxidizers.
Hazardous Decomposition Products: For thermal decomposition products, see Section 5.
Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Component Toxicological Data

Ingredient	CAS NO:	Acute Data
Propylene Glycol	57-55-6	Oral LC50: 20 - 34 g/kg (rat); Dermal LC50: >10 g/kg (rabbit)

Product Toxicological Information:

This product contains trace amounts (<0.1 wt %) of 1,4-dioxane. 1,4-Dioxane is classified by the International Agency for Research on Cancer (IARC) as a Group 2B carcinogen (human inadequate evidence, animal sufficient evidence) and is classified by the National Toxicology Program (NTP) as "reasonably anticipated to be a human carcinogen".

12. ECOLOGICAL INFORMATION

Product Ecotoxicity Data: Contact MASl's Environmental Affairs Department for available product ecotoxicity data.

Biodegradation: ND
Bioaccumulation: ND
Octanol/Water Partition Coefficient: ND

13. DISPOSAL CONSIDERATIONS

Waste Classification: ND

Waste Management: Under U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. All labeled precautions must be observed.

Disposal Method: Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

14. TRANSPORT INFORMATION

U.S. DOT

Shipping Description: Not regulated for transportation by DOT, TDG, IMDG, ICAO/IATA.

TDG (Canada):

Shipping Description: Not regulated
UN PIN No.: Not regulated

IMDG:

Shipping Description: Not regulated

ICAO/IATA:

Shipping Description: Not regulated

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15. REGULATORY INFORMATION

U.S. Federal and State Regulations

SARA 311/312 Hazard Categories: Immediate (acute) health hazard.

**SARA 302/304, 313; CERCLA RQ,
California Proposition 65:**

Note: If no components are listed below, this product is not subject to the referenced SARA and CERCLA regulations and is not known to contain a Proposition 65 listed chemical at a level that is expected to pose a significant risk under anticipated use conditions.

Ingredient	SARA 302/ /TPQs	SARA 313	CERCLA RQ	CA 65 Cancer	CA 65 Dev. Tox.	CA 65 Repro. F	CA 65 Repro. M
Alkoxylated alcohol		X					Not Listed

International Chemical Inventories

Australia AICS – Contains a component(s) that is not listed.

Canada DSL - Contains a component(s) that is not listed.

China Inventory - Contains a component(s) that is not listed.

European Union EINECS/ELINCS – Component(s) are listed or exempt from listing

Japan METI ENCS - Contains a component(s) that is not listed.

Korea TCCL ECL - Contains a component(s) that is not listed.

Philippine PICCS - Contains a component(s) that is not listed.

U.S. TSCA - Component(s) are listed or exempt from listing

U.S. TSCA – No components are subject to TSCA 12(b) export notification requirements.

Canadian Classification:

Controlled Products Regulations Statement: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Class:

D2B

16. OTHER INFORMATION

The following section(s) have been revised: 1

NA – Not Applicable, ND – Not Determined

Disclaimer:

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We can not make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.