



Section 01 - Product And Company Identification

Product Identifier	Antari Water Based Fog Liquid
Other Means of Identification	None
Product Use and Restrictions on Use	For use with fog machines.
Initial Supplier Identifier	Advance Chemicals Ltd. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Acute Toxicity-Oral	Category 4
STOT-Repeated Exposure	Category 2

Physical Hazards

No known physical hazards.

Warning

Hazards Statements

H302 – Harmful if swallowed.

H373 – May cause damage to the kidneys through prolonged or repeated oral exposure.

Pictograms



Precautionary Statements

P264 – Wash hands thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product.

P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 – Rinse mouth.

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

P314 – Get medical advice/attention if you feel unwell.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Ethylene Glycol	107-21-1	40-55%	
Water	7732-18-5	≥ 45%	

Section 04 - First Aid Measures

Inhalation	If symptoms are experienced, remove victim to fresh air. If difficulties breathing persist, seek medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water for 5 minutes. Seek medical attention. Completely decontaminate clothing, shoes and leather goods before re-use or discard.
Eye Contact	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes, while forcibly holding the eyelid(s) open to ensure complete irrigation of the eye tissue. Seek medical attention.
Ingestion	NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth with water. DO NOT INDUCE VOMITING. If vomiting occurs naturally, have victim rinse mouth with water again. Seek immediate medical attention.
Additional Information	Ethylene glycol is toxic if ingested. Kidney damage, nervous system injury and deaths have been reported. Fomepizole and alcohol are antidotal to ethylene glycol toxicity.

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Water or foam may cause frothing. Special alcohol resistant "multipurpose" firefighting foams are recommended for use on water-soluble liquids, such as ethylene glycol.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	Irritating and toxic gases such as carbon monoxide, carbon dioxide, formaldehyde may be generated during a fire. Closed containers may rupture violently when exposed to fire or excessive heat.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective gear.
Further Information	Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.
Environmental Precautions	Prevent product from entering sewers or waterways.

Methods and Materials for Containment and Cleaning Up

SMALL SPILLS: Clean up spill with inert absorbent and place in suitable, labelled containers for proper disposal.
LARGE SPILLS: Contact fire and emergency services and supplier for advice.

Section 07 - Handling and Storage

Precautions for Safe Handling	This material is a VERY TOXIC LIQUID. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Store in a cool, ventilated area, away from heat and ignition sources. Store away from incompatible materials.
Incompatibilities	Strong oxidizing agents, perchloric acid, strong bases, phosphorus (V) sulfide, silvered copper wires carrying DC current, strong acids.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Ethylene Glycol	ACGIH	TLV-C	100 mg/m ³
	OSHA	PEL-C	50 ppm

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	No specific requirement, but it is good practice to wear chemical safety goggles when product is being handled.
Hand Protection	No specific requirement but it is good practice to prevent skin contact.
Skin and Body Protection	Guidelines for ethylene glycol: RECOMMENDED (resistance to breakthrough longer than 8 hours): butyl rubber, natural rubber, neoprene rubber, nitrile rubber, polyethylene, polyvinyl chloride, Viton(R), Viton(R)/Butyl rubber, Barrier (PE/PA/PE), Silver Shield/4H(R) (polyethylene/ethylene vinyl alcohol), Trelchem(R) HPS, Trelchem(R) VPS, Tychem(R) SL (Saranex(R)), Tychem(R) F, Tychem(R) BR/LV, Tychem(R) Responder(R), Tychem(R) TK.
Respiratory Protection	An approved respirator suitable for protection from dusts and mists may be adequate.
Thermal Hazards	Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Clear, colourless
Odour	Odourless

Odour Threshold Not Applicable

Property

pH Not Available

Melting Point/Freezing Point -13°C (9°F)

Initial Boiling Point and Boiling Range 197.6°C (387.7°F)

Flash Point 111.1°C (232°F)

Evaporation Rate <0.01

Flammability Non-flammable

Upper Flammable Limit 21.6-22%

Lower Flammable Limit 3.2%

Vapour Pressure (mm Hg, 20°C) 0.05

Vapour Density (Air=1) 2.14

Relative Density Not Available

Solubility(ies) Soluble in water.
Soluble in aliphatic alcohols, glycol ethers, acetone, other ketones, aldehydes, glycerol and acetic acid. Low solubility in benzene, toluene, dichloromethane and chloroform.

Partition Coefficient: n-octanol/water Log P_{ow} = -1.36

Auto-ignition Temperature 398°C (748°F)

Decomposition Temperature Not Available

Viscosity 21 mPa·s

Explosive Properties None

Specific Gravity (Water=1) 1.05

% Volatiles by Volume Not Available

Formula C₂H₆O₂

Molecular Weight 62.07

Section 10 - Stability and Reactivity

Reactivity Not Available

Stability Normally stable.

Possibility of Hazardous Reactions None.

Conditions to Avoid	Temperatures above 111°C, heat, flames.
Incompatible Materials	Strong oxidizing agents, perchloric acid, strong bases, phosphorus (V) sulfide, silvered copper wires carrying DC current, strong acids.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and other irritating and toxic gases or fumes.

Section 11 - Toxicological Information

Acute Toxicity

Component	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Ethylene Glycol (55%)	7.3 g/kg (rat)	17.3 g/kg (rabbit)	4.9 g/m ³ (rat, 4hr)

Chronic Toxicity – Carcinogenicity

Component	IARC
Ethylene Glycol	Not considered to be carcinogenic.

Skin Corrosion/Irritation	Non to very mild irritant.
Ingestion	Toxic if ingested. Numerous reports of kidney injury, nervous system injury and deaths in people who accidentally or intentionally ingested ethylene glycol.
Inhalation	Solution must be heated or misted before inhalation exposure can occur. Higher concentrations may cause throat and upper respiratory tract irritation.
Serious Eye Damage/Irritation	Non to very mild irritant.
Respiratory or Skin Sensitization	Not considered a skin sensitizer.
Germ Cell Mutagenicity	Not mutagenic.
Reproductive Toxicity	Not expected to cause reproductive toxicity.
STOT-Single Exposure	Not Available
STOT-Repeated Exposure	In animals, short- and long- term ingestion exposures to about 1000 mg/kg/day and higher have resulted in degenerative changes in the kidneys including tubule dilation, inflammation and deposition of oxalate crystals and stones.
Aspiration Hazard	Not Available
Synergistic Materials	Not Available

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Ethylene Glycol	Not Available	LC ₅₀ (Lepomis macrochirus, 96hr): 10000mg/L	EC ₅₀ (Daphnia magna, 24hr): 2500mg/L
Biodegradability	Readily biodegrades.		
Bioaccumulation	Not Available		
Mobility	Expected to have very high mobility in the soil.		
Other Adverse Effects	Not Available		

Section 13 – Disposal Considerations

Waste From Residues/Unused Products	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	Not Regulated
UN Proper Shipping Name	Not Regulated
Transport Hazard Class(es)	Not Regulated
Packaging Group	Not Regulated
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special Precautions	Not Available
Transport in Bulk	Not Available

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date November 24, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET

- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

Advance Chemicals Ltd. - Locations

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