



SAFETY DATA SHEET

Issue Date 01-Jun-2010

Revision Date 26-Feb-2015

Version 1

1. IDENTIFICATION

Product Identifier

Product Name FROSTSAFE/FROSTGUARD 1%-99%

Other means of identification

SDS # EG

Other Information Package type: 1, 5, 55 gal.

Recommended use of the chemical and restrictions on use

Recommended Use Ethylene Glycol based anti-freeze.

Restrictions on Use Avoid food contact surfaces. For professional use only.

Details of the supplier of the safety data sheet

Manufacturer Address

Atlantic Chemical & Equipment Company
3471 Atlanta Industrial Parkway
Suite 200
Atlanta, GA 30331

Emergency telephone number

Company Phone Number 404-505-6626

1-800-929-2436

Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2B

Signal word

Warning

Hazard statements

Harmful if swallowed

Causes eye irritation



Appearance Slightly red/clear
viscous liquid

Physical state Liquid

Odor Antifreeze odor

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Rinse mouth
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Disposal

Dispose of in accordance with federal, state and local regulations

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Ethylene glycol	107-21-1	<99

4. FIRST AID MEASURES

First aid measures

General advice

Provide this SDS to medical personnel for treatment.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth. Call a physician or poison control center immediately.

Skin Contact

Wash the skin immediately with soap and water. Get medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms

May cause irritation to the mucous membranes and upper respiratory tract. May cause severe eye irritation. Will cause gastrointestinal tract irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Dry chemical, CO₂, alcohol-resistant foam or water spray.

Unsuitable Extinguishing Media Not determined.

Specific hazards arising from the chemical

Non-combustible.

Hazardous combustion products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Use personal protective equipment as required. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions Do not empty into drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Collect using an inert absorbent material and place in appropriate containers for disposal.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors, mist or gas. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Dehydrating agents. Sulfuric acid. Nitric acid. Oxygen. Hydrogen peroxide. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol 107-21-1	Ceiling: 100 mg/m ³ aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-

Appropriate engineering controls

Engineering Controls If vapors are detected, ventilate work area by opening windows and using exhaust fans. Always work with wind from behind.

Individual protection measures, such as personal protective equipment

- | | |
|---------------------------------|--|
| Eye/face protection | Wear goggles or chemical safety glasses. |
| Skin and body protection | Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear protective Neoprene™ gloves. |
| Respiratory protection | High vapor or mist concentrations may require a NIOSH approved organic vapor respirator. |

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Antifreeze odor
Appearance	Slightly viscous liquid	Odor threshold	Not determined
Color	Red/Clear		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting point/freezing point	Not determined	
Boiling point/boiling range	Not determined	
Flash point	Not determined	
Evaporation rate	Not determined	
Flammability (solid, gas)	Not determined	
Flammability Limits in Air		
Upper flammability limits	Not determined	
Lower flammability limit	Not determined	
Vapor pressure	Not determined	
Vapor density	Not determined	
Specific Gravity	1.11	
Water solubility	Not determined	
Solubility in other solvents	Not determined	
Partition coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic viscosity	Not determined	
Explosive properties	Not determined	
Oxidizing properties	Not determined	

Other Information

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Incompatible materials. Keep out of reach of children.

Incompatible materials

Dehydrating agents. Sulfuric acid. Nitric acid. Oxygen. Hydrogen peroxide. Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Organic compounds.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists.

Eye contact Causes eye irritation.

Skin Contact Irritating to skin. Avoid contact with skin.

Ingestion Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol 107-21-1	4000 mg/kg (Rat)	9530 µL/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity- Product

Not determined

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 515 mg/kg
ATEmix (dermal) 9823 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life Harmful to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 41000: 96 h Oncorhynchus mykiss mg/L LC50	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	46300: 48 h Daphnia magna mg/L EC50

Persistence and degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined.

Chemical Name	Partition coefficient
Ethylene glycol 107-21-1	0

Other adverse effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances IECSC

- China Inventory of Existing Chemical Substances KECL -

Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	107-21-1	<99	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol 107-21-1	X	X	X

U.S. EPA Label Information

16. OTHER INFORMATION

NFPA	Health hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
HMIS	Health hazards	Flammability	Physical hazards	Personal protection
	2	1	0	X

Chronic Hazard Star Legend

* = Chronic Health Hazard

Issue Date 01-Jun-2010

Revision Date 26-Feb-2015

Revision Note
new format

Disclaimer

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 a 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.

End of Safety Data Sheet