

EnviroGard

Safety Data Sheet

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 5/18/2015

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 12/21/2015

 Version:
 2

NFPA	GHS Pictogram	Personal Protective Equipment
	NONE	

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	Product form	Product code
EnviroGard	Mixture	EVG

1.2. Relevant identified uses of the substance or mixture and uses advised against Heat transfer fluid and antifreeze in all types of hydronic heating, cooling and ground source geothermal systems.

- 1.3. Details of the supplier of the safety data sheet Rhomar HTF LLC, dba Rhomar Water 2103 E. Rockhurst St., Springfield, MO 65802 USA Telephone: 417-862-2600; Fax: 417-862-6410 Email: <u>TalkToUs@RhomarWater.com</u>; Website: <u>www.RhomarWater.com</u>
- 1.4. Emergency telephone number CHEM TEL: 1-800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

GHS Pictogram: NONE

Signal Word: Warning! Irritant (eye and skin)

Hazard Statement:

H316: Causes mild skin irritation (Skin Corrosion/Irritation: Category 3).

H320: Causes eye irritation (Serious Eye Damage/Eye Irritation: Category 2B).

H303: May be harmful if swallowed (Acute Toxicity/Oral: Category 5).

Precautionary Statements:

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P332 + P313: If skin irritation occurs or if eye irritation persists: Get medical advice/attention.

P312: Call a POISON CENTER/doctor/physician if you fell unwell.

P102: Keep out of reach of children.

P233 + P410 + P403: Keep the container tightly closed in a well ventilated place. Protect from sunlight. **P501:** Dispose of contents/container in accordance with applicable federal, state and local laws.

Reference: GHS Purple Book-Annex 3

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance	CAS #	Amount, %
Propylene glycol	57-55-6	61 - 64
Corrosion inhibitors*	BLEND*	1.4 – 2.0
Water	7732-18-5	34 - 37
Green dye, food grade		<0.01

* The specific chemical identity of the corrosion inhibitors is a Rhomar Water trade secret and has thus been withheld.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice: If there exists a significant potential for exposure, refer to Section 8 for personal protective equipment Eye contact : Immediately flush thoroughly with plenty of water for 15 minutes

- Skin contact : Wash off with soap and plenty of water. Rinse thoroughly with water. Remove and wash contaminated clothing before reuse.
- Inhalation : Move to fresh air. If symptoms persist, call a physician
- Ingestion : Clean mouth with water. Drink plenty of water afterwards. Do not induce vomiting. Consult physician

4.2. Indication of any immediate medical attention and special treatment needed: None

Note to Physician: Contains propylene glycol and alkaline inhibitors. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

NFPA

Flammability 0 Health 1



Stability and reactivity 0 Physical hazard -

- 5.1. **Suitable extinguishing media**: Non-combustible. Use alcohol-resistant foam or dry carbon dioxide or media compatible with surrounding fire.
- 5.2. Unsuitable extinguishing media: Do not use direct water stream as it may aggravate the spread of the fire thus posing a fire hazard.
- 5.3. **Special hazards arising from the substance or mixture**: Thermal decomposition may result in smoke which may contain harmful combustion products such as carbon monoxide and carbon dioxide among others
- 5.4. Advise for firefighters: Wear self-contained breathing apparatus, NIOSH/MSHA (approved or equivalent) and full protective gear for firefighting if necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. **Personal precautions, protective equipment and emergency procedures**: Ensure adequate ventilation. Avoid breathing vapors or mist. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION for more information.
- 6.2. **Environmental precautions**: Do not let the product enter sewers, waterways, into soil and groundwater systems. Prevent further leakage if safe to do so. See Section 12, ECOLOGICAL INFORMATION for additional information.
- 6.3. **Methods and material for containment and cleaning**: Dam up the area of accidental release to contain large spills. Mechanically collect spillage in suitable containers for disposal. For small spills, adsorb with sawdust or any inert adsorbent material. For additional information, see Section 13, DISPOSAL CONSIDERATIONS.

SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling**: No special precautions needed when handling the product. See Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION.
- 7.2. Conditions for safe storage, including any incompatibilities: Store in original container. Keep storage container tightly closed in a well ventilated place. See Section 10, STABILITY AND REACTIVITY for more specific information.
- 7.3. **Specific end use(s)**: Apart from the uses mentioned in Section 1.2, no other specific uses are prescribed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product is not known to contain any hazardous materials with established occupational exposure limits by regional regulatory bodies

Chemical Name	Type of listing	Regulation	Value
Propylene glycol	TWA	OHSA - WEEL	10 mg/m ³

8.1.	Exposure controls	
	Eye/face protection	: Wear goggles or safety glasses with side shields.
	Skin/body protection	: Use gloves chemically resistant to this product such as those made from butyl or nitrile
		rubber when prolonged contact with material could occur.
	Respiratory protection	: Wear suitable personal respiratory protection and protective suit in case of mist, aerosol or
		spray exposure.
8.2.	Engineering controls	: Adequate ventilation should be ensured.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Lightly viscous liquid	Specific Gravity (H ₂ O=1)	1.03
Appearance	Clear, green	Evaporation Rate ($H_2O = 1$)	1.0
Odor	Little to none	Vapor Pressure	No data available
рН	9.0 – 10.0	Vapor Density (Air = 1)	No data available
Boiling Point	108 °C (226 °F)	Partition Coefficient	No data available
Freezing Point	-50.0 °C (-58.0 °F)	Water Solubility	Miscible, 100% Literature
Decomposition temperature	No data available	Flammability Limits (solid, gas)	Not applicable to liquids
Oxidizing properties	No data available	Autoignition Temperature	No test data available
Flash Point	104°C (219°F), Pensky-Martens Closed Cup ASTM D93 based on Propylene glycol		
Flammability/explosive limit	Lower: 2.6 % Vol; upper: 12.5 % Vol Literature Propylene glycol (25°C, 760 mmHg)		
Molecular Weight	No data available		

9.2. Other information : None available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity : No data available
- 10.2. Chemical stability : Stable under recommended storage conditions
- 10.3. Possibility of hazardous reactions: Polymerization will not occur
- 10.4. **Conditions to avoid** : Exposing this product to elevated temperatures can cause it to decompose generating gases which can cause pressure buildup in closed systems.
- 10.5. Incompatible materials : Avoid contact with strong oxidizers, strong acids, strong bases
- 10.6. Hazardous decomposition products: None

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: No significant toxicity concern posed by oral, dermal and inhalation exposure to this product.

Chemical name	Exposure route	Test specimen	Lethal Dose (LD ₅₀)	Reference
Propylene glycol;	Oral	Rat	8000-46000 mg/Kg	Literature
		Mouse	23000-24900 mg/Kg	
		Guinea pig	18000-20000 mg/Kg	
	Skin	Rabbit	Non-irritant	
	Eye	Rabbit	Non-irritant	
Mixture		No test data available		

Chronic effects

Carcinogenicity : No ingredient of this product in levels $\ge 0.1\%$ is identified and listed by OSHA, ACGIH, NTP, IARC or Mexico as a known or suspected carcinogen

Mutagenic, reproductive, developmental, target organ or neurological effects : No information available.

SECTION 12: ECOLOGICAL INFORMATION

 12.1.
 Toxicity
 : No test data available

 12.2.
 Persistence and degradability: This product is readily biodegradable

 12.3.
 Bioaccumulative potential
 : No data available

 12.4.
 Mobility in soil
 : Mobility potential of product in soil is very high due to its 100 % miscibility with water

 12.5.
 Other adverse effects
 : None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Unused/uncontaminated product** : Contact a licensed: Recycler. Reclaimer. Incinerator.

13.2 **Waste disposal methods** : Whenever possible, minimize waste. Waste should be disposed of in accordance with all laws and regulations pertaining to this product in your area of jurisdiction.

13.3 **Contaminated packaging** : Decontaminate empty containers. Treat decontamination fluid as waste and dispose as above. You may take the containers for local recycling.

NOTE: Do not dump into any sewers, on the ground, or into any water body. All disposal practices must be in compliance with all federal, state/provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are solely the responsibility of the waste generator.

SECTION 14: TRANSPORT INFORMATION

International Transport regulations: This product is not covered by the international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

Domestic Transport regulations : DOT (USA) - Not regulated; TDG (Canada) - Not regulated; MEX (Mexico) - Not regulated

NOTE: This information is not intended to convey all specific regulatory or operational requirements relating to the transportation of this product. Additional transportation information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of this material.

SECTION 15: REGULATORY INFORMATION

US Federal regulations:

SARA 313:	This product does not contain any components with known CAS numbers that exceed the threshold
	reporting levels established by SARA Title III, Section 313.

SARA 311/312: Acute health hazard: No Chronic health hazard: No

SARA 302: This product is not known to contain any chemical components subject to the reporting requirements of SARA Title III, Sections 302 or regulations contained in 40 CFR 302.

15.2. US State regulations

Pennsylvania Worker and Community-Right-To-Know Act (Act 159 of 1984): Propylene glycol (CAS RN 57-55-6) is listed because of the additional requirements of the Pennsylvania Law

Proposition 65: This product does not contain chemicals listed in the State of California as carcinogens, reproductive toxins at levels requiring a warning under this statute

15.3. Worldwide Chemical Inventory Status :

All the ingredients in this product are listed in USA's TCSA, and Canada's DSL inventories

SECTION 16: OTHER INFORMATION

Prepared by	Preparation date	Revision date	Revision number
Rhomar HTF LLC, dba Rhomar Water	01/30/2012	5/18/2015	2

LEGEND:

CAS	: Chemical Abstracts Service	CFR	: Code of Federal Regulations
TWA	: Time Weighted Average	DOT	: Department of Transport
IMDG	: International Maritime Dangerous Goods	ΙΑΤΑ	: International Air Transport Association
WEEL	: Workplace Environmental Exposure Limit	TDG	: Transport of Dangerous Goods
NTP	: National Toxicity Program	DSL	: Domestic Substances List
SARA	: Superfund Amendments and Reauthorization Act	OHSA	: Occupational Health and Safety Act
OSHA	: Occupational Safety and Health Administration	TCSA	: Toxic Substances Control Act
IARC	: International Agency for Research on Cancer	MSHA	: Mine Safety and Health Administration
NIOSH	: National Institute for Occupational Safety and	ADR &	RID: European Agreements Concerning
	Health		International Carriage of Dangerous Goods by
ACGIH	: American Conference of Government Industrial Hygienists		Rail and by Road

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