

EnviroGard RTU-30

Safety Data Sheet

Revision date: 4/27/2015 Print date: 1/18/2016

Version:

2

| NFPA | GHS Pictogram | Personal Protective Equipment | |
|--------|---------------|-------------------------------|--|
| 100 | NONE | | |
| VALK . | | | |

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

1.1. Product identifier

| Product name | Product form | Product code | |
|-------------------|--------------|--------------|--|
| EnviroGard RTU-30 | Mixture | EVG-RTU-30 | |

- 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 T 417-862-2600; F 417-862-6410

Email: TalkToUs@RhomarWater.com; Website: www.RhomarWater.com

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 | 30 – 32 |
| Corrosion inhibitors* | BLEND* | 0.5 - 1.0 |
| Water | 7732-18-5 | 67 – 70 |
| 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

- : 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

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

SECTION 5: FIREFIGHTING MEASURES

NFPA

Flammability 0 Health



- 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 Propylene glycol Type of listing TWA:

Regulation OHSA - WEEL

Value $10 \, \text{mg/m}^3$

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

Information on basic physical and chemical properties 9.1.

| Physical state | Lightly viscous liquid | Specific Gravity (H ₂ O=1) | 1.02 | |
|------------------------------|--|---|---------------------------|--|
| Appearance | Clear or green | Evaporation Rate (H ₂ O = 1) | 1.0 | |
| Odor | Little to none | Vapor Pressure | No data available | |
| рH | 9.0 – 10.0 | Vapor Density (Air = 1) | No data available | |
| Boiling Point | >100°C (212°F) | Partition Coefficient | No data available | |
| Freezing Point | -12.8°C (+9.0°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

Possibility of hazardous reactions: Polymerization will not occur 10.3,

Exposing this product to elevated temperatures can cause it to decompose generating 10.4. Conditions to avoid gases which can cause pressure buildup in closed systems.

10.5. Incompatible materials : Avoid contact with strong oxidizers, strong acids, strong bases

Hazardous decomposition products: None 10.6.

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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 namé | 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

12.2.

Carcinogenicity: No ingredient of this product in levels ≥ 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
- 12.3. Bioaccumulative potential : No data available
- : Mobility potential of product in soil is very high due to its 100 % miscibility with water 12.4. Mobility in soil
- 12.5. Other adverse effects
- # None known

Persistence and degradability: This product is readily biodegradable

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Unused/uncontaminated product : Contact a licensed: Recycler, Reclaimer, Incinerator:
- 13.2 : Whenever possible, minimize waste. Waste should be disposed of in accordance with Waste disposal methods all laws and regulations pertaining to this product in your area of jurisdiction.
- Decontaminate empty containers. Treat decontamination fluid as waste and dispose as 13.3 Contaminated packaging 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

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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 | 01/30/2009 | 4/27/2015 | 2 |
| | | | |
| LEGEND: | | | |
| CAS : Chemical Abstracts Service | CFR. | : Code of Federal Regu | lations |

TWA DOT : Time Weighted Average : Department of Transport IMDG : International Maritime Dangerous Goods IATA : International Air Transport Association WEEL TDG : Workplace Environmental Exposure Limit : 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 International Carriage of Dangerous Goods by Health

Health International Carriage of Dangerous Goods 1

ACGIH : American Conference of Government Industrial Rail and by Road

American conference of Government industrial

Hygienists.

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