

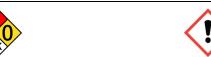
Alde Antifreeze Safety Data Sheet

Revision date: 8/31/2020 Print date: 8/31/2020

Version: 1

Personal Protective Equipment

NFPA GHS Pictogram







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

1.1. Product identifier

| Product name | Product form | Product code |
|-----------------|--------------|--------------|
| Alde Antifreeze | Mixture | RG-RTU-50-GD |

- 1.2. Relevant identified uses of the substance or mixture and uses advised against: Antifreeze/heat transfer fluid with corrosion inhibitors for all metal components of hydronic heating systems.
- 1.3. Details of the supplier of the safety data sheet

Truma Corp

ADDRESS: 2800 Harman Drive, Elkhart, IN 46514 USA

1.4. Emergency telephone number

CHEM TEL: 1-800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

| Hazard Classification | | GHS Pictogram: |
|--|-----------------------------------|------------------|
| Acute Toxicity, Oral Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation | Category 4 Category 3 Category 2B | <u>(!</u>) |
| Hazard Statement: | | GHS Signal Word: |
| H316: Causes mild skin irritation. | | _ |
| H320: Causes eye irritation. | | WARNING |
| H302: Harmful if swallowed. | | |

Precautionary Statements:

P264 + P270: Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.
 P305 + P351 + P338 + P337 + P313: 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.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P301 + P331 + P312: IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

P233 + P410 + P403: Keep the container tightly closed in a well-ventilated place. Protect from sunlight.

Reference: GHS Purple Book-Annex 3

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Substance | CAS # | Amount, % |
|--|--------------|-----------|
| Propylene glycol | 57-55-6 | 50 - 53 |
| Water | 7732-18-5 | 46 – 49 |
| Alkaline filming corrosion inhibitors* | PROPRIETARY* | 0.9 – 1.5 |
| Reserve alkalinity booster | PROPRIETARY* | <1 |
| Presto Brilliant Blue dye | | <0.01 |

^{*} The specific chemical identities of the alkaline filming corrosion inhibitors, dispersant and reserve alkalinity booster are a trade secret and are thus 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. Avoid overexposure of this product to the eyes and skin. Do not ingest RG-RTU-50.

 $\textbf{Eye contact} \quad : \textbf{Immediately flush thoroughly with plenty of water for 15 minutes while lifting the lower and upper} \\$

eyelids occasionally. Seek medical attention if eye irritation occurs.

Skin contact : Wash off with soap and plenty of water. Rinse thoroughly with water. Seek medical attention if

irritation occurs. Remove and wash contaminated clothing before reuse.

Inhalation: Move to fresh air. If breathing stops, administer artificial respiration. If symptoms persist, call a

physician immediately.

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, dispersants and alkaline filming corrosion inhibitors. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

NFPA

Flammability 1 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. Or that which is appropriate for the 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 (SCBA) which are 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. Use safety glasses and impervious gloves as a minimum for personal protection. 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.

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SECTION 7: HANDLING AND STORAGE

- 7.1. **Precautions for safe handling:** No special precautions needed when handling the product but use of proper personal protective equipment is encouraged. Avoid contact with the eyes and prolonged or repeated skin contact. Observe standard industrial hygiene practices. 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. Avoid storing Alde Antifreeze with strong acids and oxidizers. 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

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

8.1. Exposure controls

Eye/face protection : Wear dust and splash proof 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. Wear impervious clothing.

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. Safety shower and eyewash station should be

located in the immediate workplace.

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) | 1.01 |
|------------------------------|------------------------|---|---------------------------|
| Appearance | Green Colored | Evaporation Rate (H ₂ O = 1) | 1.0 |
| Odor | Little to none | Vapor Pressure | No data available |
| рН | 7.5 – 8.5 | Vapor Density (Air = 1) | No data available |
| Boiling Point (760 mmHg) | ~106 °C (222 °F) | Partition Coefficient | No data available |
| Freezing Point | -33.9°C (-29.0°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 | No available data | | 1 |
| Flammability/explosive limit | No available data | | |
| 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 and handling 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

| Chemical name | Exposure route | Test specimen | Lethal Dose (LD ₅₀) | Reference |
|------------------|---------------------------------|------------------------|---------------------------------|------------|
| | Oral | Rat | 8,000 - 46,000 mg/Kg | Literature |
| | | Mouse | 23,000 - 24,900 mg/Kg | |
| Propylene glycol | | Guinea pig | 18,000 - 20,000 mg/Kg | |
| | Skin | Rabbit | Non-irritant | |
| | Eye | Rabbit | Non-irritant | |
| Alde Antifreeze | Eye, Respiratory, oral, skin | No test data available | | |

Chronic effects

Carcinogenicity: No ingredient of this product in levels $\geq 0.1\%$ 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. Aquatic toxicity

| Chemical Name | Description of ecological effect | | | |
|------------------|---|--|--|--|
| Propylene glycol | Acute $LC_{50} > 51,400 \text{ mg/L}$ (96 hour; Fathead minnow - Pimephales promelas) | | | |
| | Acute EC ₅₀ > 1,000 mg/L (48 hour; Water flea - Daphnia magna) | | | |
| | Acute EC ₅₀ > 19,000 mg/L (96 hour; Fresh water algae – Pseudokirchneriella subcapitata) | | | |
| Alde Antifreeze | 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 likely high due to its 100 % miscibility with water

12.5. Other adverse effects:

None known

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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.
- 13.4 **Physical properties that may affect disposal activities:** Alde Antifreeze doesn't meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity and none of its ingredients are listed in 40 CFR 261.33
- 13.5 **Chemical properties that may affect disposal activities:** Toxicity Characteristic Leaching Procedures (TCLP) has not been performed on Alde Antifreeze.

NOTE: 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. Alde Antifreeze is non-hazardous by DOT standards.

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 is not known to contain any chemicals at levels subject to the reporting requirements of SARA (1986) Title III, Sections 313
- SARA 311/312: Acute health hazard: No Chronic health hazard: No
- **SARA 302:** This product is not known to contain any chemicals subject to the reporting requirements of SARA (1986) Title III, Sections 302 or Section 304.

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 herein listed to meet the additional requirements of the Pennsylvania State Law

Proposition 65: This product does not contain chemicals listed in the State of California as carcinogens, reproductive toxins 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

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SECTION 16: OTHER INFORMATION

This product is manufactured for Truma Corp by:

Rhomar Water 2103 E Rockhurst Street Springfield, MO 65802

| This SDS was Prepared by | Preparation date | Revision date | Revision number |
|--------------------------|------------------|---------------|-----------------|
| RhomarWaterTechServ | 08/31/2020 | 08/31/2020 | 1 |

LEGEND:

| CAS : Chemical Abstracts Service CFR : Code of Federal Reg | ulations |
|--|-------------------------|
| TWA : Time Weighted Average DOT : Department of Transp | ort |
| IMDG : International Maritime Dangerous Goods IATA : International Air Tran | sport Association |
| WEEL : Workplace Environmental Exposure Limit TDG : Transport of Dangero | ius Goods |
| NTP : National Toxicity Program DSL : Domestic Substances | _ist |
| SARA : Superfund Amendments and Reauthorization Act OHSA : Occupational Health | and Safety Act |
| OSHA : Occupational Safety and Health Administration TCSA : Toxic Substances Con | trol Act |
| IARC : International Agency for Research on Cancer MSHA : Mine Safety and Hea | Ith Administration |
| NIOSH : National Institute for Occupational Safety and ADR & RID: European Agreeme | nts Concerning |
| Health International Carriag | e of Dangerous Goods by |
| ACGIH: American Conference of Government Industrial Rail and by Road Hygienists | |

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