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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Product form</th>
<th>Product code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alde Antifreeze</td>
<td>Mixture</td>
<td>RG-RTU-50-GD</td>
</tr>
</tbody>
</table>

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
TEL: +1 (855) 558-7862 ext. 1
FAX: +1 (574) 538-2426
WEBSITE: www.TRUMA.net
EMAIL: info@trumacorp.com

1.4. Emergency telephone number

CHEM TEL: 1-800-255-3924

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

<table>
<thead>
<tr>
<th>Hazard Classification</th>
<th>GHS Pictogram:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity, Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Category 3</td>
</tr>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 2B</td>
</tr>
</tbody>
</table>

Hazard Statement:

H316: Causes mild skin irritation.
H320: Causes eye irritation.
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
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS #</th>
<th>Amount, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>50 - 53</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>46 - 49</td>
</tr>
<tr>
<td>Alkaline filming corrosion inhibitors*</td>
<td>PROPRIETARY*</td>
<td>0.9 – 1.5</td>
</tr>
<tr>
<td>Reserve alkalinity booster</td>
<td>PROPRIETARY*</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Presto Brilliant Blue dye</td>
<td></td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

* 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.

Eye contact: 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

<table>
<thead>
<tr>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability 1</td>
</tr>
<tr>
<td>Health 1</td>
</tr>
<tr>
<td>Stability and reactivity 0</td>
</tr>
<tr>
<td>Physical hazard -</td>
</tr>
</tbody>
</table>

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.
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Type of listing</th>
<th>Regulation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>TWA</td>
<td>OHSA - WEEL</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Lightly viscous liquid</th>
<th>Specific Gravity (H₂O=1)</th>
<th>1.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Green Colored</td>
<td>Evaporation Rate (H₂O = 1)</td>
<td>1.0</td>
</tr>
<tr>
<td>Odor</td>
<td>Little to none</td>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.5 – 8.5</td>
<td>Vapor Density (Air = 1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point (760 mmHg)</td>
<td>~106 °C (222 °F)</td>
<td>Partition Coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>-33.9°C (-29.0°F)</td>
<td>Water Solubility</td>
<td>Miscible, 100% Literature</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>Flammability Limits (solid, gas)</td>
<td>Not applicable to liquids</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
<td>Autoignition Temperature</td>
<td>No test data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No available data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability/explosive limit</td>
<td>No available data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Test specimen</th>
<th>Lethal Dose (LD50)</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>Oral</td>
<td>Rat</td>
<td>8,000 – 46,000 mg/Kg</td>
<td>Literature</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mouse</td>
<td>23,000 – 24,900 mg/Kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guinea pig</td>
<td>18,000 – 20,000 mg/Kg</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td>Rabbit</td>
<td>Non-irritant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>Rabbit</td>
<td>Non-irritant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alde Antifreeze</td>
<td>Eye, Respiratory, oral, skin</td>
<td>No test data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chronic effects**

- **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. **Aquatic toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Description of ecological effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>Acute LC50 &gt; 51,400 mg/L (96 hour; Fathead minnow - Pimephales promelas)</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 &gt; 1,000 mg/L (48 hour; Water flea - Daphnia magna)</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 &gt; 19,000 mg/L (96 hour; Fresh water algae – Pseudokirchneriella subcapitata)</td>
</tr>
<tr>
<td>Alde Antifreeze</td>
<td>No test data available</td>
</tr>
</tbody>
</table>

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

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. THE MANUFACTURER OR SUPPLIER ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO USERS OR THIRD PARTIES CAUSED BY THE MATERIAL. USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THE MATERIAL.