SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS 380
PRODUCT: PRESTONE® RV ANTIFREEZE
PRODUCT NUMBER: AF-222, AF222-55/F
FORMULA NUMBER: YA-955, YA-967

MANUFACTURER: Prestone Products Corporation
Danbury, CT 06810-5109

CANADIAN OFFICE: Fram Group (Canada), Inc.
Mississauga, Ontario L5L 3S6

MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:
(800)890-2075 (in the US)
(800)668-9349 (in Canada)

TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):
CHEMTREC 1-800-424-9300 (in the US)
CANUTEC (613)996-6666 (in Canada)

SDS DATE OF PREPARATION/REVISION: 01/12/16

PRODUCT USE: Antifreeze for water systems in recreational vehicles, boats, vacation homes and swimming pools - consumer product

2. Hazards Identification

GHS Classification: Not Hazardous

Label Elements: None Required

3. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>60-80%</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>20-40%</td>
</tr>
</tbody>
</table>

The exact concentrations are a trade secret.

4. First Aid Measures

INHALATION: No adverse effects are expected, however, if irritation or other symptoms develop, remove to fresh air. Seek medical attention if symptoms persist.

SKIN CONTACT: Remove contaminated clothing and wash skin with soap and water. Seek medical attention if irritation develops.

EYE CONTACT: Immediately flush with water, holding open eyelids, for 15 minutes. Seek medical attention if irritation persists.

INGESTION: If large amounts are swallowed, seek medical attention. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

MOST IMPORTANT SYMPTOMS: May cause eye irritation. Ingestion of large amounts may cause acidosis and central nervous system effects.
INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: Seek immediate medical attention for large ingestions.

NOTES TO PHYSICIAN: Following acute ingestion signs of toxicity unlikely. Ethanol treatment as in ethylene glycol poisoning is inappropriate. There is no specific antidote. Treatment should be directed at the control of symptoms and the clinical condition. Monitor for acidosis and central nervous system effects.

### 5. Firefighting Measures

**SUITABLE EXTINGUISHING MEDIA:** For large fires, use alcohol type or all purpose foam. For small fires, use water spray, carbon dioxide or dry chemical.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** A solid stream of water or foam directed into hot, burning liquid can cause frothing. Heat from fire may generate flammable vapor. Fine sprays or mists may be combustible at temperatures below the normal flash point. Burning may produce carbon monoxide and carbon dioxide.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool exposed container with water spray or fog. Burning liquid may float on water.

### 6: Accidental Release Measures

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing and equipment (See Section 8).

**METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP:** Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

### 7. Handling and Storage

**PRECAUTIONS FOR SAFE HANDLING:**
- Avoid eye and prolonged or repeated skin contact.
- Avoid breathing vapors or mists.
- Wash exposed skin thoroughly with soap and water after use.
- Keep container away from open flames and excessive heat.
- Do not reuse empty containers unless properly cleaned.
- Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "auto ignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

**NFPA CLASSIFICATION:** Not applicable
8. Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>EXPOSURE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None Established</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>10 mg/m³ TWA AIHA WEEL</td>
</tr>
</tbody>
</table>

APPROPRIATE ENGINEERING CONTROLS: Use general ventilation or local exhaust as required to minimize exposures.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: None normally needed.

GLOVES: None normally needed. For prolonged contact rubber or neoprene gloves can be worn.

EYE PROTECTION: Safety glasses or goggles recommended if splashing is possible.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEARANCE:</td>
<td>Red-orange liquid</td>
</tr>
<tr>
<td>ODOR THRESHOLD:</td>
<td>Not determined</td>
</tr>
<tr>
<td>ODOR:</td>
<td>Characteristic odor</td>
</tr>
<tr>
<td>pH:</td>
<td>9.2</td>
</tr>
<tr>
<td>MELTING/FREEZING POINT:</td>
<td>6-13°F ((-14.4)-(-10.6°C))</td>
</tr>
<tr>
<td>BOILING POINT/RANGE:</td>
<td>214-218°F (101.1-103.3°C)</td>
</tr>
<tr>
<td>FLAMMABILITY (SOLID, GAS):</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>FLAMMABILITY LIMITS:</td>
<td>LEL: 2.6% (propylene glycol)</td>
</tr>
<tr>
<td></td>
<td>UEL: 12.5% (propylene glycol)</td>
</tr>
<tr>
<td>VAPOR PRESSURE:</td>
<td>0.075 mmHg @ 20°C</td>
</tr>
<tr>
<td>VAPOR DENSITY:</td>
<td>Greater than 1</td>
</tr>
<tr>
<td>RELATIVE DENSITY:</td>
<td>1.01-1.03</td>
</tr>
<tr>
<td>SOLUBILITIES:</td>
<td>Water: Complete</td>
</tr>
<tr>
<td>PARTITION COEFFICIENT (n-octanol/water):</td>
<td>Not determined</td>
</tr>
<tr>
<td>AUTOIGNITION TEMPERATURE:</td>
<td>Not determined</td>
</tr>
<tr>
<td>DECOMPOSITION TEMPERATURE:</td>
<td>Not determined</td>
</tr>
<tr>
<td>VISCOSITY:</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

REACTIVITY: Normally uncreative.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Reactions with strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds will generate heat.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.
11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: No significant adverse health effects are expected from inhalation exposure.

SKIN CONTACT: No significant irritation is expected. Not expected to be absorbed through the skin.

EYE CONTACT: Direct contact may cause stinging and tearing but no residual injury or discomfort.

INGESTION: Considered relatively non-toxic following acute ingestion, however, lactic acidosis, stupor and seizures have been reported following chronic ingestion and in individuals with underlying kidney disease.

CHRONIC EFFECTS: None currently known.

CARCINOGENICITY LISTING: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

ACUTE TOXICITY VALUES:

Propylene Glycol: LD50 Oral Rat: 20,000 mg/kg
LD50 Skin Rabbit: 20,800 mg/kg

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH: This product contains less than 0.2% tolyltriazole which has demonstrated mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolyltriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC, ACGIH, or OSHA.

12. Ecological Information

ECOTOXICITY:
Propylene Glycol: LC50: Daphnia magna, 43,500 mg/L/ 48 hr; LC50: Pimephales promelas, 46,500 mg/L/ 96 hr

PERSISTENCE AND DEGRADABILITY: Propylene glycol achieved 64% of its theoretical BOD using a sewage inoculum and a 5 day incubation period

BIOACCUMULATIVE POTENTIAL: Propylene Glycol has an estimated BCF of 3 suggests the potential for bioconcentration in aquatic organisms is low.

MOBILITY IN SOIL: Propylene Glycol is expected to have very high mobility in soil.

OTHER ADVERSE EFFECTS: None known

13. Disposal Considerations

Dispose of product in accordance with all local, state/provincial and federal regulations.

14. Transport Information

U.S. DOT HAZARD CLASSIFICATION: Not Regulated

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.
IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Not hazardous

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: This product does not contain substances known to the State of California to cause Cancer and/or Reproductive Harm.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

CHINA. All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

16. Other Information

NFPA Rating: Fire: 1  Health: 1  Reactivity: 0

REVISION SUMMARY: Section 1: Product Number

SDS Date of Preparation/Revision: June 25, 2013

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:
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