MSDS - Material Safety Data Sheet

Product Name: GLASS CLEANER WITH AMMONIA (AEROSOL)

MSDS No.: GC1

I. Basic Information:

Manufacturer: RADIATOR SPECIALTY COMPANY
Address: P.O. BOX 159, 600 RADIATOR ROAD
City, ST Zip: INDIAN TRAIL, NC  28079
Emergency Contact: Rocky Mountain Poision Control Center
Emergency Telephone Number: 303-623-5716
Contact: Robert Geer
Information Telephone Number: 704-688-3430

Chemical State: Liquid
Chemical Type: Mixture

II. Ingredients:

Trade Secret: No

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical Name</th>
<th>% Range</th>
<th>EHS NTP</th>
<th>IARC SUB Z</th>
<th>SARA 313</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>111762</td>
<td>2-Butoxyethanol</td>
<td>X</td>
<td>25 ppm</td>
<td></td>
<td></td>
<td>25 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1336216</td>
<td>Ammonium hydroxide</td>
<td></td>
<td></td>
<td>50 ppm (TW25 ppm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106978</td>
<td>Butane</td>
<td></td>
<td></td>
<td>800 ppm</td>
<td></td>
<td>800 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67630</td>
<td>Isopropyl alcohol</td>
<td>X</td>
<td>400 ppm</td>
<td></td>
<td></td>
<td>400 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74986</td>
<td>Propane</td>
<td></td>
<td></td>
<td>1000 ppm ASPHYXIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hazard Category:

Acute: X
Chronic: No
Fire: No
Pressure: X
Reactive: No

Hazardous Identification Information:

CAUTION: Eye Irritant, Contents Under Pressure.
N.F.P.A. Level 1 Aerosol

IV. First Aid Measures:

Route(s) of Entry:
Absorption, Eye, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

Signs and Symptoms:
Eye Contact: Direct spray of vapors may be irritating or harmful to eyes.
Skin Contact: Prolonged contact may cause irritation due to defatting of skin.
Inhalation: High concentration of vapors may irritate nose and throat and cause headaches and nausea.
Ingestion: Can cause irritation, gastric disturbances, and nausea.
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**Medical Conditions Generally Aggravated by Exposure:**

**Emergency and First Aid Procedures:**

- **Eye Contact:** Flush eyes with water for 15 minutes while lifting upper and lower eyelid. Get prompt medical attention.
- **Skin Contact:** Wash with soap and water. If irritation persists, get prompt medical attention.
- **Inhalation:** Move to fresh air. If breathing becomes difficult, give oxygen and get prompt medical attention.
- **Ingestion:** Drink water or milk. Call Poison Control Center, physician, or hospital emergency room immediately.

**Other Health Warnings:**

**V. Fire Fighting Measures:**

- **Flash Point:** None
- **Lower Explosive Limit:** N/D
- **Upper Explosive Limit:** N/D
- **F.P. Method:** TCC
- **Fire Extinguishing Media:** Water Fog, Foam, Carbon Dioxide, Dry Chemical

**Special Fire Fighting Procedures:**

- Wear self-contained, positive pressure breathing apparatus and protective clothes. Cool containers exposed to heat with water fog.

**Unusual Fire and Explosion:**

- Use shield to protect from venting, rupturing, or bursting cans.

**VI. Accidental Release Measures:**

**Steps to be Taken in Case Material is Released or Spilled:**

- Use appropriate protective equipment. Contain spill and then absorb spill with inert material or rags and scoop into a chemical waste container. Neutralize remaining traces of material and flush with water followed by liberal covering with sodium bicarbonate. All clean-up material should be removed and placed in approved containers for disposal. Rinse water may be disposed of down a sanitary sewer system if authorized by the local municipality.

**VII. Handling and Storage:**

**Precautions to be Taken:**

- Use with adequate ventilation. Do not take internally. Do not expose to heat or store at temperatures above 120 F. Do no puncture or incinerate container.

**Other Precautions:**

- Avoid contact with strong oxidizing agents.
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### VIII. Exposure Controls/Personal Protection:

**Ventilation Requirements:**

See Section 2 for applicable exposure limits. Use with adequate ventilation. If TLV is exceeded, wear NIOSH approved respirator.

**Personal Protective Equipment:**

See Section 2 for applicable exposure limits. For prolonged exposure wear protective safety glasses, gloves, and apron.

### IX. Physical and Chemical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>212 F</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1):</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Specific Gravity (H2O = 1):</td>
<td>0.97500</td>
</tr>
<tr>
<td>Solubility In Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Other Information:</td>
<td>pH: 11-12</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg.):</td>
<td>N/D</td>
</tr>
<tr>
<td>Vapor Density (AIR = 1):</td>
<td>N/D</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>Clear liquid with alcohol-ammonia odor.</td>
</tr>
</tbody>
</table>

### X. Stability and Reactivity:

**Stability:**

Stable

**Incompatibility (Materials to Avoid):**

Avoid contact with strong oxidizing agents

**Decomposition/By Products:**

Carbon Monoxide, Carbon Dioxide

**Hazardous Polymerization:**

Will not occur

### XI. Toxicological Information:

No data available.

### XII. Ecological Information:

No data available

### XIII. Disposal Considerations:

**DISPOSAL:** This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

### XIV. Transport Information:

**DOT Hazard Class:** ORM-D

**Shipping Name:** Consumer Commodity
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XV. Regulatory Information:

See Section 2 for SARA Reportable Chemicals.

USA TSCA: All components of this material are listed on the US TSCA Inventory.

XVI. Other Information:

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

N/E: Not Established
N/D: Not Determined
N/A: Not Applicable
N/AV: Not Available

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