Material Safety Data Sheet

Revision Date
December 18, 2007
Prepared by
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Section 1: Product Identification

MSDS Code: 803 - liquid
Name: Projector Cooling Fluid
Related Part Numbers: 803-250ML; 803-500ML
Use: For use in cooling projection tubes.

Section 2: Hazardous Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percentage by weight</th>
<th>ACGIH TWA</th>
<th>Osha Pel</th>
<th>Osha Stel</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-21-1</td>
<td>1,2-ethanediol</td>
<td>65 - 80</td>
<td>39.4ppm</td>
<td>N/e</td>
<td>100mg/m³</td>
</tr>
<tr>
<td>56-81-5</td>
<td>1,2,3-propanetriol</td>
<td>35 - 20</td>
<td>10mg/m³</td>
<td>N/e</td>
<td>10mg/m³</td>
</tr>
</tbody>
</table>

Section 3: Hazards Identification

WHMIS Codes: D2B
NFPA Ratings:
Health 2
Flammability 1
Reactivity 1
HMIS Ratings:
Health 2
Flammability 1
Reactivity 1

Eyes: This product causes irritation, redness, and pain
Skin: May cause skin irritation.
Inhalation: Product may be mildly irritating to the nose, throat and respiratory tract and may cause coughing and sneezing. May cause kidney damage, metabolic acidosis, accelerated heart rate, low blood pressure, central nervous system depression, headache, dizziness, diarrhea, nausea and vomiting, and pulmonary edema. Extreme prolonged exposure may lead to systematic poisoning and death.
Ingestion: Harmful if swallowed.
Chronic: This product may sensitize heart muscle causing cardiac arrhythmia, in rare cases.

Section 4: First Aid Measure

Eyes: Remove contact lenses. Flush with water or saline for 20 minutes. Get medical aid if symptoms persist.
Skin: Remove contaminated clothing. Wash skin with large quantities of soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice.
Inhalation: Immediately remove from exposure to fresh air. If breathing is difficult, give oxygen. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Get medical aid immediately.
Ingestion: Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing, rinse out mouth and give 1/2 to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid aspiration of vomit, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.
Section 5: Fire Fighting Measures

Autoignition Temperature: 396°C  
Flash Point: 116°C  
LEL / UEL: 3.2 / 15.3

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

General Information: Will burn if involved in a fire. Containers may explode in the heat of a fire. Spilled materials may cause floors and contact surfaces to become slippery.

Section 6: Accidental Release Measures

Spill Procedure: Remove all sources of ignition. Provide adequate ventilation. Wear appropriate personal protection. Sprinkle absorbent compound onto spill, then sweep into a plastic or metal container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area, away from incompatible substances.

Section 8: Exposure Controls

Routes of entry: Eyes, ingestion, inhalation, and skin.

Ventilation: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.

Personal Protection: Wear appropriate protective eyeglasses or chemical safety goggles. Wear appropriate protective clothing to prevent skin contact. Use a NIOSH approved respirator when necessary.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State:</th>
<th>Liquid</th>
<th>Odor:</th>
<th>Mild</th>
<th>Solubility:</th>
<th>Completely</th>
<th>Evaporation Rate:</th>
<th>&gt;1 (ether=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point:</td>
<td>102°C</td>
<td>Specific Gravity:</td>
<td>1.12</td>
<td>Vapor Pressure:</td>
<td>&gt;1 PSI @21°C</td>
<td>Vapor Density:</td>
<td>2.1(Air=1)</td>
</tr>
</tbody>
</table>

| pH: | 10 |

Section 10: Stability and Reactivity

Stability: Stable at normal temperatures and pressures.

Conditions to avoid: Temperatures over 40°C, ignition sources, and incompatible substances.

Incompatibilities: Strong oxidizers, Lewis or mineral acids, materials reactive with hydroxyl bearing compounds, strong bases, isocyanates, aluminum and its alloys.

Polymerization: Will not occur.

Decomposition: Carbon monoxide, carbon dioxide, aldehydes, acids, and ketones.
Section 11: Toxicological Information

Sensitization: (effects of repeated exposure)  Repeated skin contact may cause defatting of the skin resulting in dermatitis.

Carcinogenicity: (risk of cancer)  No

Teratogenicity: (risk of malformation in an unborn fetus)  No

Reproductive Toxicity: (risk of sterility)  No

Mutagenicity: (risk of heritable genetic effects)  No

| Lethal Exposure Concentrations: | Ingestion (LD50): 4700 mg/kg (rat) | Inhalation (LC50): 10,876 mg/m³ (/4hrs) (rat) | Skin (LD50): 9,530 mg/Kg (rabbit) |

Section 12: Ecological Information

General Information: Avoid runoff into storms and sewers, which lead into waterways. Water runoff can cause environmental damage.

Environmental Impact Data: (percentage by weight)
- CFC: 0
- HFC: 0
- Cl.Solv: 0
- VOC: 0
- HCFC: 0
- ODP: 0

Section 13: Disposal Information

General Information: Dispose of in accordance with all local, provincial, state, and federal regulations. Water runoff can cause environmental damage.

Section 14: Transportation Information

Ground: Non-regulated

Air: Non-regulated

Sea: Non-regulated

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)
- None of the chemicals in this product have a reportable quantity.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)
- This product does not contain any chemicals subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)
- All substances are TSCA listed.

CAA (Clean Air Act, USA)
- This product does not contain any class 1-ozone depletors.
- This product does not contain any class 2-ozone depletors.
This product does not contain any chemicals listed as hazardous air pollutants.

**California Proposition 65** (Chemicals know to cause cancer or reproductive toxicity, May 1, 1997 revision, USA)

This product does not contain any chemicals listed.

**Health Canada**

Labeling and containers used in this product are listed in compliance with Consumer Chemicals and Container regulations.

**Environment Canada**

Chemicals in this product are listed on the Domestic Substances List in the Canadian Environmental Protection Act.

This product does not contain any ozone depleting substances.

**Industry and Science Canada**

Labeling, product identity, net quantity declaration, minimum printing type size heights, and packaging of this product is in compliance with the Consumer Packaging and Labeling Act and Regulations. This product is not slack filled in accordance to chapter 4 prohibitions.

**RoHS** (The restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2004).

This product is RoHS compliant.

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### Section 16: Other Information

**Definitions:** N/a = not applicable, n/e = not established

**Disclaimer:** This material safety data sheet is provided as an information resource only. M.G. Chemicals believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.