Product and Company Identification

Product Name: Inorganic Pyrophosphatase, yeast
Cat #: PI-100, PI-200, PI-300, PI-OEM
Product Use: For Research Use Only. Not for use in diagnostic procedures
Company: Molecular Cloning Laboratories (MCLAB)
384 Oyster Point Blvd, Suite 15
South San Francisco
CA 94080
Telephone: 888-MCLAB-88
650-872-0245
Fax: 650-872-0253

Composition/information on ingredients

Hazardous/Non-hazardous Compounds

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS #</th>
<th>Formula</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>HOCH₂CHOHCH₂OH</td>
<td>NO</td>
</tr>
</tbody>
</table>

Synonyms: glycerin, glycerol USP, glycerine, 1,2,3-propanetriol, propanetriol, 1,2,3-trihydroxypropane, bulbold, citifluor AF 2, cristal, emergy 916, glyrol, glycerol ophthalgan, glyciterol, glycy alcohol, osmoglyn, prerine 9091

Hazardous Ingredients Identification

Emergency Overview:
May cause irritation to skin, eyes, and respiratory tract, may affect kidneys.

HMIS and NFPA Ratings:
0 – Minimal or None, 1 – Slight, 2 – Moderate, 3 – Serious, and 4 – Severe

Health: 2
Flammability: 0
Reactivity: 1

First Aid Measures

FIRST AID:
SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.
EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid.
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but it is not necessary to induce. Never give anything by mouth to an unconscious person.

Fire Fighting Measures
Fire Extinguisher Type:
Carbon Dioxide, dry chemical powder or appropriate foam
Fire/Explosion Hazards:
Slight Flammability. Material must be heated before ignition will occur.
Fire Fighting Procedure:
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

Accidental Release Measures
Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

Handling and Storage

<table>
<thead>
<tr>
<th>HANDLING</th>
<th>STORAGE</th>
<th>NOTES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid inhalation</td>
<td>Keep tightly closed</td>
<td>Hygroscopic</td>
</tr>
<tr>
<td>Avoid contact with eyes, skin, and clothing</td>
<td>Store in cool, dry place</td>
<td></td>
</tr>
<tr>
<td>Avoid prolonged or repeated exposure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exposure Controls/Personal Protective Equipment

Engineering Controls:
Safety shower and eye wash. Mechanical exhaust.
Personal Protective Equipment:
Eye Protection:
Safety goggles.
Hand Protection:
Compatible resistant gloves.
Respiratory Protection:
None required.
Hygiene Measure:
General practice, wash (hands and skin) thoroughly after handling. Remove and wash contaminated clothing.

Physical and Chemical Properties
Physical State: Form: Liquid
Color: Clear or colorless
Odor: None or odorless

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Temperature or Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point Range:</td>
<td></td>
<td>182°C</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>Melting Point Range:</td>
<td>20°C</td>
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<tr>
<td>Flash Point:</td>
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<td></td>
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<tr>
<td>Auto Ignition Temp:</td>
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<tr>
<td>Vapor Pressure:</td>
<td>&lt; 1 mmHg</td>
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<tr>
<td>Vapor Density:</td>
<td>3.1 g/l</td>
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<tr>
<td>Specific Gravity:</td>
<td>1.262</td>
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<tr>
<td>Solubility in Water:</td>
<td>Soluble</td>
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</tr>
</tbody>
</table>

**Stability and Reactivity**

**Stability:**
Stable

**Materials to Avoid:**
Strong oxidizing agents, strong bases

**Hazardous Decomposition products:**
Carbon Monoxide, Carbon Dioxide

**Hazardous Polymerization:**
Will not occur

**Toxicological Information**

**Conditions aggravated / target organs:** Single dose oral toxicity is low. Ingestion of larger amounts may cause injury. Signs and symptoms of excessive exposure may be central nervous system effects and increased blood sugar levels. Person with preexisting conditions may be more susceptible.

**DOT Classification:** Not Regulated

DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations.

**Ecological Information**
Data not available.

**Disposal considerations**
Dispose of in accordance with local regulations.

**Transport Information**
Substance considered non-hazardous for ground or air transport. No DOT shipping name required.

**Regulatory Information**

**OSHA Hazards:** None known.

**US Classification and Label Test**
US Statements: Caution. Avoid contact and inhalation. Target Organ(s): Kidneys.

United States Regulatory Information:
Sara Listed: No
TSCA Inventory Item: Yes

Canada Regulatory Information
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DSL: Yes
NDSL: No

EU Additional Classification
S: 23 24/25

Safety Statements: Do not breath vapor. Avoid contact with skin and eyes.

Other Information
Disclaimer: This product intended for R&D and clinical diagnostic uses. Use of material must be supervised by technically qualified individual. This above information is believed to be correct but may not be all inclusive and shall be used as a reference guide only. Company shall not be held liable for any damage resulting from handling or contact with above product.