LACTO PHENOL COTTON BLUE

MATERIAL SAFETY DATA SHEET

The following information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.

Product Identification

Product Name: Lacto phenol cotton blue
Product Code: ES848
Product Description: An aqueous solution of glycerin, phenol, cotton blue and lactic acid.

| Health | 2 |
| Flammability | 0 |
| Reactivity | 1 |
| Physical Hazard | None |

Section 1 - Shipping Data

DOT Shipping Name: Not regulated CC
DOT Hazard Class: Not applicable
DOT Identification: Not applicable
Tel. # for information: (610) 524-5810
Emergency Tel. #: (800) 424-9300
Prepared by: P.B.

Section 2 - Hazardous Ingredients / Identity Information

<table>
<thead>
<tr>
<th>CHEMICAL COMPONENTS</th>
<th>CAS#</th>
<th>%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerine</td>
<td>56-81-5</td>
<td>43.6% w/w</td>
<td>10 mg/m³ TWA</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>lactic acid</td>
<td>138-22-7</td>
<td>17.4% w/w</td>
<td>------</td>
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</tr>
<tr>
<td>phenol</td>
<td>108-95-2</td>
<td>17.5% w/v</td>
<td>19 mg/m³</td>
<td>19 mg/m³</td>
</tr>
<tr>
<td>cotton blue</td>
<td>------</td>
<td>0.05% w/v</td>
<td>------</td>
<td>------</td>
</tr>
</tbody>
</table>

Section 3 - Physical / Chemical Characteristics
Boiling Point: 111-113° C
Specific Gravity (H₂O = 1): 1.16
Vapor Pressure (mm Hg and Temperature): 18 @ 20° C
Evaporation Rate (water = 1): unknown
Vapor Density (AIR=1): 3.2
Solubility in Water: 100%
Appearance and Odor: An clear blue solution with the characteristic odor of phenol.

Section 4 - Fire and Explosion Hazard Data

Flash Point (Method Used): Not applicable
Extinguishing Media: Not applicable
Special Fire Fighting Procedures: Not applicable.
Unusual Fire and Explosive Hazards: Pyrolysis will release toxic and corrosive phenol vapor.

Section 5 - Reactivity Data

Stability: Stable
Conditions to Avoid: Heat
Incompatibility (Materials to Avoid): Strong oxidizers.
Precautions to be taken in Handling and Storage: Store at room temperature.

Section 6 - Health Hazard Data

Routes of Entry
Inhalation? yes
Skin Absorption? yes
Ingestion? yes
Carcinogenicity? no
NTP? no
IARC Monographs? no
OSHA Regulated? no

Health Hazards (Acute and Chronic): Phenol is absorbed through intact skin and is highly toxic by ingestion, inhalation, or absorption. Gastrointestinal effects include: nausea, pain, bloody vomitus and diarrhea. Corrosive to skin and mucous membranes.

Signs and Symptoms of Exposure: Tachycardia, tachypnea, weak pulse, cardiac failure, pulmonary edema and respiratory failure.

Medical Conditions Generally Aggravated by Exposure: Pulmonary disease and skin disease.

Emergency and First Aid Procedures:
Seek medical assistance for further treatment, observation and support if necessary.
Eye Contact: Flush with water at least 15 minutes and get medical attention.
Skin contact: Remove contaminated clothing and wash with alcohol or soap and water. Get medical attention if irritation persists.
Ingestion: Do not induce vomiting if patient is unconscious or extremely drowsy. Otherwise administer 2 glasses of water and induce vomiting. Get immediate medical attention even if symptoms improve.

Section 7 - Precautions For Safe Handling and Use

Steps to be Taken In Case of Spill Or Release: Absorb with a suitable absorbent (such as a paper towel) and dispose.
Waste Disposal Methods: The preferred disposal method is incineration. The amount of phenol that can be flushed down the drain is restricted in many localities. Insure compliance with all government regulations.

Section 8- Control Measures

Respiratory Protection (Specify Type): Generally not required.
Ventilation: Laboratory fume hood is recommended for handling phenolic solutions.
Protective Gloves: Plastic or rubber gloves impervious to phenol.
Eye Protection: Laboratory safety goggles or face mask.
Other Protective Clothing And Equipment: Lab coats or similar clothing are recommended to protect street clothes.
Hygienic Work Practices: Wash well after handling, especially before eating and smoking.