Material Safety Data Sheet

Carbol Fuchsin Stain

Section 1: Product and Company Identification

Carbol Fuchsin Stain

Synonyms/General Names: Carbol Fuchsin, Biological Stain
Product Use: For educational use only
Manufacturer: Columbus Chemical Industries, Inc., Columbus, WI 53925.

24 Hour Emergency Information Telephone Numbers
CHEMTREC (USA): 800-424-9300
Scholar Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14656; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification

Opaque red liquid, characteristic phenol odor

WARNING! Moderately toxic by ingestion and severely corrosive to body tissue.
Target organs: Central nervous system, liver, kidneys, eyes.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

HMIS (0 to 4)

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Section 3: Composition / Information on Ingredients

Ethyl Alcohol, (64-17-5), 6-7%
Fuchsin Basic, (632-99-5), <1%
Phenol, 90%, Liquified, (108-95-2), 4-5%
Water, (7732-18-5), 87-88%

Section 4: First Aid Measures

Always seek professional medical attention after first aid measures are provided.

Eyes: Immediately flush eyes with excess water for 15 minutes, lifting lower and upper eyelids occasionally.
Skin: Immediately flush skin with excess water for 15 minutes while removing contaminated clothing.
Ingestion: Call Poison Control immediately. Rinse mouth with cold water. Give victim 1-2 cups of water or milk to drink. Induce vomiting immediately.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration.

Section 5: Fire Fighting Measures

When heated to decomposition, emits acrid fumes.

Protective equipment and precautions for firefighters: Use foam or dry chemical to extinguish fire. Firefighters should wear full fire fighting turn-out gear and respiratory protection (SCBA). Cool container with water spray. Material is not sensitive to mechanical impact or static discharge.

Section 6: Accidental Release Measures

Use personal protective recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all ignition sources and ventilate area. Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7: Handling and Storage

Green

Handling: Use with adequate ventilation and do not breathe dust or vapor. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling.
Storage: Store in General Storage Area [Green Storage] with other items with no specific storage hazards. Store in a cool, dry, well-ventilated, locked store room away from incompatible materials.

Section 8: Exposure Controls / Personal Protection

Use ventilation to keep airborne concentrations below exposure limits. Have approved eyewash facility, safety shower, and fire extinguishers readily available. Wear chemical splash goggles and chemical resistant clothing such as gloves and aprons. Wash hands thoroughly after handling material and before eating or drinking. Exposure guidelines: Ethyl Alcohol: OSHA PEL: 1900 mg/m³ and ACGIH TLV: 1000 ppm, STEL: N/A. Phenol: OSHA PEL: 19 mg/m³, ACGIH: TLV: 19 mg/m³, STEL: 60 mg/m³ ceiling/skin. Fuchsin Basic Stain: OSHA PEL: N/A, ACGIH: TLV: N/A, STEL: N/A

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1/12/2012
Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular formula</td>
<td>Mixture.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>N/A.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.9846 g/mL @ 20°C.</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>0.7 (water).</td>
</tr>
<tr>
<td>Melting Point</td>
<td>0°C.</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>100°C.</td>
</tr>
<tr>
<td>Vapor Pressure (20°C)</td>
<td>N/A.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>118°C (244 °F) CC Ethanol.</td>
</tr>
<tr>
<td>Autoignition Temp.</td>
<td>N/A.</td>
</tr>
<tr>
<td>Appearance</td>
<td>Opaque red liquid.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic phenol odor.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Complete.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A (Butyl acetate = 1).</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A (log P ow).</td>
</tr>
<tr>
<td>pH</td>
<td>N/A.</td>
</tr>
<tr>
<td>LEL</td>
<td>4.0% Ethanol.</td>
</tr>
<tr>
<td>UEL</td>
<td>20.0% Ethanol.</td>
</tr>
</tbody>
</table>

N/A = Not available or applicable

Section 10: Stability and Reactivity

Stability: Stable under normal conditions of use and storage.
Incompatibility: Oxidizing agents, acids, halogens, calcium hypochlorite.
Shell life: Indefinite if stored properly.

Section 11: Toxicology Information

Ingestion: Irritation and burning sensations of mouth and throat, nausea, vomiting and abdominal pain. Inhalation: Irritation of mucous membranes, coughing, wheezing, shortness of breath.
Chronic Effects: No information found.
Sensitization: none expected
Ethyl Alcohol: LD50 oral, rat); 7060 mg/kg; LC50 [rat]; 20,000 mg/l (10 hours); LD50 Dermal [rabbit]; 20 mg/24H MOD
Phenol: LD50 [oral, rat]; 317 mg/kg; LC50 [rat]; 316 mg/m³; LD50 Dermal [rabbit]; 500mg/24 hrs/severe.
Fuchsin Basic Stain: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A
Fuchsin Basic Stain: Lethal Dose 50 (mortality rate 50%): oral, rat 317 mg/kg; dermal, rabbit 20 mg/24H MOD
Fuchsin Basic Stain: LD50 [oral, rat]; N/A; LC50 [rat]; N/A; LD50 Dermal [rabbit]; N/A

Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecotoxicity (aquatic and terrestrial):

Toxic to terrestrial and aquatic plants and animals. Do not release to the environment.

Section 13: Disposal Considerations

Check with all applicable local, regional, and national laws and regulations. Local regulations may be more stringent than regional or national regulations. Small amounts of this material may be suitable for sanitary sewer or trash disposal.

Section 14: Transport Information

DOT Shipping Name: Not regulated by DOT.
DOT Hazard Class: Identification Number: 
Canada TDG: Not regulated by TDG.
Hazard Class:
UN Number:

Section 15: Regulatory Information

EINECS: Not listed.
TSCA: All components are listed or are exempt.
WHMIS Canada: Not WHMIS Controlled.
California Proposition 65: Not listed.

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

Section 16: Other Information

Current Issue Date: January 12, 2012
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