Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501

Customer Service: Phone (310)787-6800
FAX (310)787-4464

CHEMTREC Emergency Response Telephone Number: (800)424-9300
Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please
direct all other inquiries to our customer service phone number.

Section I - Product Identification
Methylene blue, basic fuchsin, phenol and reagent alcohol dissolved in water.

Section II - Hazards Identification
Warning: Flammable liquid and vapor. Keep away from heat, sparks, open flames and hot surfaces. Keep container tightly
closed. Use only non-sparking tools. Take precautions against static discharge. Wear protective clothes and eye
protection. In case of skin contact immediately remove all contaminated clothing. Rinse with water or shower. In case of fire,
use fire extinguishers approved for alcohol fires. Store in a cool, well ventilated place.

Safety Ratings
Health: Hazardous  Flammability: Flammable liquid and vapor  Reactivity: Slight  Contact: Hazardous
Recommended safety equipment: safety goggles, lab coat and proper gloves
Storage: Keep cool, away from sources of ignition in a well ventilated area.

NFPA Ratings
Health = 2  Flammability = 2  Reactivity = 1

Potential Health Effects
The toxicology of this compound have not been completely examined. It is presumed that the toxicity of this item is
similar to other products containing aliphatic alcohols or phenol.
Inhalation: Alcohols and phenol are absorbed through the mucous membranes. Absorption can produce irritation as well
as chemical burns.
Ingestion: Inhalation will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death.
Skin contact: Alcohols and phenol are absorbed through the skin. Absorption will produce chemical burns as well as the
same effects as ingestion.
Eye contact: Corrosive to the eye.
Chronic Exposure: Unknown.
Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to alcohols and
phenols. Preexisting eye, skin, and respiratory conditions may also be aggravated. Methanol has shown genetic toxicity
in some animals.

Section III - Composition/Information on Components

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>OSHA Pel</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>1000 ppm</td>
<td></td>
<td>9% v/v</td>
</tr>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>19 mg/m³</td>
<td>19 mg/m³</td>
<td></td>
<td>5% w/v</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>400 ppm</td>
<td>400 ppm</td>
<td></td>
<td>0.5% v/v</td>
</tr>
<tr>
<td>Methyl alcohol</td>
<td>67-56-1</td>
<td>200 ppm (skin)</td>
<td>200 ppm (skin)</td>
<td>0.5% v/v</td>
<td></td>
</tr>
<tr>
<td>Methylene blue</td>
<td>61-73-4</td>
<td></td>
<td></td>
<td></td>
<td>0.38% w/v</td>
</tr>
<tr>
<td>Basic fuchsin</td>
<td>569-61-9</td>
<td></td>
<td></td>
<td></td>
<td>0.1% w/v</td>
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</tbody>
</table>
Section IV - First Aid Measures

**Inhalation:** Remove from source of exposure and be prepared to assist breathing. Get medical attention immediately.

**Ingestion:** Do not give anything by mouth if patient is unconscious or extremely drowsy. Administer 0.5 - 1 oz. of vegetable oil. Consult a poison control center on weather vomiting is advisable. Get immediate medical attention even if symptoms improve.

**Skin Contact:** In case of skin contact, remove contaminated clothing and flush with water. Treat affected area with polyethylene glycol and get immediate medical attention.

**Eye Contact:** In case of eye contact, flush with water for at least 15 minutes and get immediate medical attention.

Section V - Fire Fighting Measures

**Flash point:** 120 °F (49 °C) TCC

**Flammable Limits (for ethanol):** LEL 3%  UEL 19%

**Fire:** Water is ineffective against alcohol fires but may be used to cool adjacent containers.

**Fire Extinguishing Media:** Alcohol foam, carbon dioxide or dry chemical.

**Special information:** Pyrolysis will release toxic phenol and carbon monoxide.

Section VI - Accidental Release Measures

Remove all sources of ignition, absorb with a suitable absorbent (such as paper towels) and dispose.

Section VII - Handling and Storage

Store in a closed container, away from open flames or other sources of ignition.

Section VIII - Exposure Control/Personal Protection

**Airborne Exposure Limits:** See section III.

**Ventilation System:** Local or general exhaust is recommended when handling phenolic or alcoholic solutions. When required, Refer to the ACGIH document, “Industrial Ventilation, a Manual of Recommended Practices” for details about ventilation.

**Personal Respirator:** Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

**Skin protection:** Protective gloves are recommended as part of good laboratory practice.

**Eye Protection:** Laboratory safety goggles or similar products are required and recommended as part of good laboratory practice.

Section IX - Physical and Chemical Properties

**Boiling Point:** 93 °C - 94 °C

**Density:** 0.99 g/ml

**Vapor pressure (mm Hg):** unknown

**Evaporation Rate (water = 1):** 1

**Vapor Density (air = 1):** 3.2

**Solubility:** Infinitely miscible with water

**Appearance and Odor:** A purple liquid with the characteristic odor of alcohol and phenol.

Section X - Stability and Reactivity

**Stability:** Normally stable. Freezes at low temperature.

**Hazardous Decomposition Products:** Nothing unusual.

**Hazardous polymerization:** Will not occur.

**Incompatibilities:** Oxidizers.

**Conditions to avoid:** heat, flame and sources of ignition.

Section XI - Toxicological Information

Chronic consumption of ethanol is believed to be linked to liver disease, cancer and birth defects.
Cancer lists

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>NTP?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
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<tbody>
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<td>Basic fuchsin</td>
<td>no</td>
<td>no</td>
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</tr>
<tr>
<td>Ethanol</td>
<td>no</td>
<td>no</td>
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<tr>
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<td>no</td>
<td>no</td>
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<tr>
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<td>Methylene blue</td>
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</tr>
<tr>
<td>Phenol</td>
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</table>

Section XII - Ecological Information

Environmental Fate: Biodegradable.

Environmental Toxicity: Phenol is toxic to marine organisms.

Ethanol evaporates quickly and is not expected to bioaccumulate. The material is removed from the air by dry and liquid adsorption. The half-life for ethanol in the atmosphere is one to ten days.

Section XIII - Disposal Considerations

Local governments often restrict the amounts of alcohol and/or phenol that may be flushed down drain. Dispose of contents and container in accord with all applicable regulations.

Section XIV - Transportation Information

DOT Shipping name: Not regulated.

DOT Hazard Label: Not applicable.

Section XV - Regulatory Information

Chemical Inventory Status

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Yes</td>
</tr>
<tr>
<td>Ethanol</td>
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<td>Yes</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Methanol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Methylene blue</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Phenol</td>
<td>Yes</td>
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</table>

Federal, State and International Regulations

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302 RQ</th>
<th>SARA 313 TPQ</th>
<th>RCRA List</th>
<th>RCRA Category</th>
<th>TSCA 261.33</th>
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<th>Ca. Prop 65</th>
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<tr>
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<td>No</td>
<td>U154</td>
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<td>No</td>
<td>U188</td>
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<td>500</td>
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<td>No</td>
<td>U188</td>
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</tbody>
</table>

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: Yes
SARA 311/312: Acute: Yes, Chronic: Yes, Flammable: Yes

Section XVI - Other Information

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

Revision Date: Jan. 16, 2018