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
A solution of water in phenol.

Section II - Hazards Identification
Danger. Fatal if swallowed. Wash thoroughly after handling. Do not eat drink or smoke while using this product. If swallowed immediately call a poison center and rinse mouth with water. Administer antidote for phenol poisoning if available. Phenol is rapidly absorbed through intact skin and is highly toxic by ingestion, inhalation or contact.

Safety Ratings

<table>
<thead>
<tr>
<th>Health: Extremely hazardous</th>
<th>Flammability: Slight</th>
<th>Reactivity: Slight</th>
</tr>
</thead>
</table>

Recommended safety equipment: safety goggles, lab coat and proper gloves

Storage: Room Temperature.

NFPA Ratings

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Potential Health Effects

Phenol is toxic and corrosive. Even short exposure to skin or eyes may produce irreversible damage. Phenol is particularly toxic to the central nervous system, kidneys and liver

_Inhalation:_ Phenol is absorbed through skin and mucous membranes and will produce irritation as well as the same effects as ingestion.

_Ingestion:_ Ingestion can produce CNS disturbance, dizziness, headache, stupor, coma and death. Phenol is toxic.

_Skin contact:_ Contact with phenol will cause chemical burns that may be initially painless and are slow to heal.

_Eye contact:_ Will cause eye damage.

_Chronic Exposure:_ Will cause symptoms similar to acute exposure.

_Aggravation of preexisting conditions:_ May aggravate preexisting liver, kidney or pulmonary conditions

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>Phenol</td>
<td>108-95-2</td>
<td>5 ppm (Skin) TWA</td>
<td>5 ppm (Skin) TWA</td>
<td>89%</td>
<td></td>
</tr>
</tbody>
</table>

Section IV - First Aid Measures

_Inhalation:_ Remove from source of exposure and get medical attention immediately. Be prepared to treat for any breathing difficulty.

_Ingestion:_ Never give anything by mouth to a unconscious person. If the victim is conscious administer about 1 oz of castor oil or vegetable oil. Get immediate medical attention even if symptoms improve.

_Skin Contact:_ In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. Get medical advice.

_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: 79 °C (174 °F)
Flammable Limits: LEL 1.3, UEL 8.6

Explosion: Not normally an explosion hazard.
Fire Extinguishing Media: Alcohol type foam, carbon dioxide or dry chemical.
Special information: Pyrolysis will release phenol and toxic oxides such as 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 locked up. Store in a closed container at controlled room temperature.

Section VIII - Exposure Control/Personal Protection

Airborne Exposure Limits: See section III.

Ventilation System: Local exhaust, e.g. chemical fume hood, is recommended. 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 clothing such as lab coats, gloves and lab aprons are recommended.

Eye Protection: Laboratory safety goggles or face shields are recommended. An eye wash station should be readily available.

Section IX - Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>182 °C</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg) @ 20 °C</td>
<td>0.35 mm Hg</td>
</tr>
<tr>
<td>Vapor Density (air = 1)</td>
<td>3.2</td>
</tr>
<tr>
<td>Density</td>
<td>1.06 g/ml</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Solubility</td>
<td>Phenol is soluble in water to about 6%</td>
</tr>
<tr>
<td>Appearance and Odor</td>
<td>A clear solution with the characteristic odor of phenol</td>
</tr>
</tbody>
</table>

Section X - Stability and Reactivity

Stability: Freezes at very 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

Phenol is toxic by absorption, ingestion and inhalation.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known Carcinogenicity?</th>
<th>NTP?</th>
<th>Anticipated?</th>
<th>IARC Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>3</td>
</tr>
</tbody>
</table>

Section XII - Ecological Information

Environmental Fate: Biodegradable

Environmental Toxicity: Unknown, but expected to be toxic to aquatic organisms.
Section XIII - Disposal Considerations
Incineration at a licensed chemical disposal facility is the preferred disposal method. Local governments often restrict the amount of phenol that may be flushed down drain. Dispose of contents and container in accordance with all government regulations.

Section XIV - Transportation Information
DOT Shipping name: Phenol solution Hazard Class: 6.1 Packaging Group II
DOT Hazard Label: Poison DOT Identification Number: UN2821
Note: UPS will not accept phenol unless packaged in special Dot exempt packaging.

Section XV - Regulatory Information

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>TSCA</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>SARA 302</th>
<th>SARA 313</th>
<th>RCRA</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>RQ 1000</td>
<td>TPQ 500</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>261.33 U188 8(D) Ca. Prop 65</td>
</tr>
</tbody>
</table>

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

Section XVI - Other Information
This information is believed to be correct but is not waranteed as such, nor does it purport to be all inclusive.

Revision Date: Jan. 3, 2018