1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Phenol Solution 10% - 89%
Product code: 400505, 400506, 400508, 400509, 400512, 400515, 400524, 400764
Supplier: HealthLink, Inc
3611 St Johns Bluff Road, Suite 1
Jacksonville, FL 32224
800-638-2625
Monday-Friday: 8:00 -5:00 PM

Synonym: None.
Material uses: Laboratory Reagent.
Validation date: 5/26/15
In case of emergency: 800-424-9300 CHEMTREC (USA)
24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

Emergency Overview
Target Organs: Eyes, Kidney, Liver, Heart, Central Nervous System

GHS Label Elements: Pictogram

Signal Word Danger!

Hazardous Statement(s)
H301; Toxic if Swallowed (Cat 3)
H334; Respiratory Sensitization (Cat 1B)
H337; May cause damage to organs (Cat 2)
H318; Causes serious eye damage (Cat 1)

Potential Health Effects
Inhalation - May be harmful if inhaled. Causes respiratory tract irritation.
Skin - May be harmful if absorbed through skin. Causes skin irritation.
Eyes - Causes eye irritation. Ingestion - May be harmful if swallowed.

Precautionary Statement(s)
P260; Do not breathe fumes/vapors
P262; Do not get in eyes, skin or clothing
P280; Wear protective gloves/eye protection
P302; Wash with plenty of water

HMIS Classification
<table>
<thead>
<tr>
<th>Health hazard</th>
<th>Fire</th>
<th>Reactivity Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

NFPA Rating
<table>
<thead>
<tr>
<th>Health hazard</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Target Organs
Central Nervous System (CNS), Skin, Liver, Kidney, Spleen, Blood
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>%w/v</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol</td>
<td>108-95-2</td>
<td>10% -89%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Balance</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact:** In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation:** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Ingestion:** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Water spray, dry chemical, CO2 and foam

**Not suitable:** None known.

**Special exposure hazards:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without training.

**Hazardous thermal decomposition products:** No specific data.

**Special protective equipment for fire-fighters:** Wear protective clothing with NIOSH approve breathing apparatus. Product of combustion may be harmful in a fire situation. Do not use direct water stream.

**Special remarks on explosion hazards:** May emit toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Spill:** Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see section 1 for emergency contact information and section 13 for waste disposal. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

**Handling:** Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Engineering measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
<th>Type</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol Solution</td>
<td>US (OSHA)</td>
<td>TWA</td>
<td>5 ppm</td>
<td>29 CFR 1910.1000 Table Z-1 Limits for Air Containments</td>
</tr>
<tr>
<td>Phenol Solution</td>
<td>US (ACGIH)</td>
<td>TLV</td>
<td>5 ppm</td>
<td>Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans</td>
</tr>
</tbody>
</table>

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic, sweet, medicinal</td>
</tr>
<tr>
<td>pH:</td>
<td>~3.8</td>
</tr>
<tr>
<td>Boiling/condensation point:</td>
<td>NA</td>
</tr>
<tr>
<td>Melting/freezing point:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>1.06</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>0.36 (Water) compared with (n-Butyl Acetate = 1)</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Soluble in the following materials: water</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Chemical stability:</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possibility of hazardous reactions:</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Hazardous polymerization:</td>
<td>Under normal conditions of storage and use, hazardous polymerization will not occur.</td>
</tr>
<tr>
<td>Conditions to avoid:</td>
<td>Excessive heat.</td>
</tr>
<tr>
<td>Hazardous decomposition products:</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under fire condition; carbon oxides</td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure: Skin, Eyes and Respiratory Tract

**Ingestion:** Toxic, will burn respiratory tract, cause nausea and vomiting. Lower doses may decreased body temperature, pain in digestive tract, shallow respiration, weak pulse unconsciousness and death.

**Skin:** Causes skin burns, blisters including allergic skin reaction

**Inhalation:** Vapor could be toxic, cause severe irritation and sensitization. Symptoms include a burning sensation, coughing, shortness of breath, nausea, headache or dizziness. Severe over-exposure may produce lung damage, or choking or death.

**Eye Contact:** Vapors cause eye burning, blurred vision or blindness.

Carcinogenicity: IARC, Not Listed; NTP, Not Listed, ACGIH, Not Listed, Humans; Not Listed

**Mutagenicity:** No known significant effects or critical hazards. Lab animal studies suggest formaldehyde may be Mutagenic.

**Teratogenicity:** No known significant effects or critical hazards except possibly in laboratory animals.

**Reproductive:** No known significant effects or critical hazards except possibly in laboratory animals.

Acute toxicity; Oral LD50 NA, Inhalation LC50 NA, Dermal LD50 NA,

12. ECOLOGICAL INFORMATION

**Environmental effects:** Formaldehyde has a half-life of less than one day. Readily biodegradable

**Other adverse effects:** No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

**DOT:** UN 2821, Phenol Solution, 6.1, II

**IMDG:** UN 2821 Phenol Solution, 6.1, II

**IATA:** UN 2821, Phenol Solution, 6.1, II

**TDG:** UN 2821, Phenol Solution, 6.1, II
15. REGULATORY INFORMATION

SARA 313 Listed RQ 1,111 lbs.

SARA 311/312 Hazardous Categorization: Acute Health Hazard, Yes; Chronic HH, Yes; Fire Hazard, No; Sudden Release of Pressure and Reactive Hazard, No

CWA: Listed

CWA: Listed

OSHA Hazards

CERCLA/SARA 302: Listed SARA Title III, Section 302.

California Proposition 65, Listed: This product does not contain a chemical known to cause cancer or birth defects

RTK: Phenol, CAS 108-95-2, MA, MN, NJ, PA

US Department of Homeland Security

Other International Regulations

Canada WHMIS Hazardous Class; D2A Very Toxic Material
D2B Toxic Material

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)

H301, H311; Toxic if swallowed, in contact with skin or if inhaled
H331;
H314; Causes severe skin burns and eye damage
H317; May cause an allergic skin reaction
H370; Causes damage to organs

Notice to reader
This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Healthlink be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.