Phenol 88%

MSDS # 520.00

ScholAR Chemistry

Section 1: Product and Company Identification

Phenol 88%

Synonyms/General Names: Carbolic Acid
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 **CANUTEC (Canada): 613-424-6666**

ScholAR Chemistry; 5100 W. Henrietta Rd, Rochester, NY 14586; (866) 260-0501; www.Scholarchemistry.com

Section 2: Hazards Identification

This material may be a liquid or a solid depending on the storage temperature, colorless to light pink solid. Characteristic odor.
DANGER! Strongly corrosive to body tissue and toxic by ingestion, skin absorption, and inhalation.
Combustible liquid.
Target organs: Liver, kidneys.

HMIS (0 to 4)

Health	4
Fire Hazard	2
Reactivity	0

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

Section 3: Composition / Information on Ingredients

Phenol (108-95-2), 88-90%. Water (7732-18-5), 10-180%.

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

IIIA Combustible solid. When heated to decomposition, emits acrid fumes of carbon oxides. Yields flammable vapors when heated, which will form explosive mixtures with air.
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. Water containing Phenol can cause burns. Material is not sensitive to mechanical impact or static discharge.

Section 6: Accidental Release Measures

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Sweep up spill and place in sealed bag or container for disposal. Wash spill area after pickup is complete. See Section 13 for disposal information.

Section 7: Handling and Storage Blue

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 Toxic Storage Area [Blue Storage] with other toxic material. Store in a dedicated poison cabinet. 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. Use NIOSH-approved respirator with an organic cartridge. Exposure guidelines: Phenol: OSHA PEL: 19 mg/m^3, ACGIH: TLV: 19 mg/m^3, STEL: N/A.

Section 9: Physical and Chemical Properties

Molecular formula	C_6H_5OH.	**Appearance**	Colorless to light pink solid or liquid.
Molecular weight	94.11.	**Odor**	Characteristic odor.
Specific Gravity	1.07 g/mL @ 20°C.	**Odor Threshold**	N/A.
Vapor Density (air=1)	3.24.	**Solubility**	Slightly soluble in water .
Melting Point	5-17°C.	**Evaporation rate**	<0.03 *(Butyl acetate = 1).*
Boiling Point/Range	181°C.	**Partition Coefficient**	N/A . *(log P_{OW}).*
Vapor Pressure (20°C)	N/A.	**pH**	Corrosive.
Flash Point:	79°C (175°F).	**LEL**	1.3.
Autoignition Temp.:	715°C (1319°F).	**UEL**	8.6.

N/A = Not available or applicable

Section 10: Stability and Reactivity

Avoid heat and ignition sources. Note: The melting point of this material is lower than the flash point. Use caution when heating.
Stability: Stable under normal conditions of use and storage.
Incompatibility: Strong oxidizers, halogens, calcium hypochlorite.
Shelf life: Poor shelf life, protect from light and heat.

Section 11: Toxicology Information

Acute Symptoms/Signs of exposure: ***Eyes***: Redness, tearing, itching, burning, damage to cornea, conjunctivitis, loss of vision. ***Skin***: Redness, blistering, burning, itching, tissue destruction. ***Ingestion***: Irritation and burning sensations of mouth and throat, ulceration, convulsions, shock, nausea, vomiting and abdominal pain. ***Inhalation***: Irritation of mucous membranes, coughing, wheezing, shortness of breath, headache, spasm, inflammation and edema of bronchi or pneumonitis.
Chronic Effects: Death from kidney and liver damage. Dermatitis, corneal erosion or loss of vision.
Sensitization: none expected
Phenol: LD50 [oral, rat]; 317 mg/kg; LC50 [rat]; 316 mg/m^3; LD50 Dermal [rabbit]; 500mg/24 hrs/severe.
Material has not been found to be a carcinogen nor produce genetic, reproductive, or developmental effects.

Section 12: Ecological Information

Ecotoxicity (aquatic and terrestrial): Toxic to terrestrial and aquatic plants and animals. Do not release to 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. Use a licensed chemical waste disposal firm for proper disposal.

Section 14: Transport Information

DOT Shipping Name:	Phenol, solid.	**Canada TDG:**	Phenol, solid.
DOT Hazard Class:	6.1, pg II.	**Hazard Class:**	6.1, pg II.
Identification Number:	UN1671.	**UN Number:**	UN1671.

Section 15: Regulatory Information

EINECS: Listed (203-632-7) .
TSCA: All components are listed or are exempt.
WHMIS Canada: B3, D1A, E: Combustible, Toxic material, Corrosive.
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 23, 2009