Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Phenol Liquefied USP
Commercial Name Not available.
Product Use Not available.
Restrictions On Use Not available.

Product Code 50-1657

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

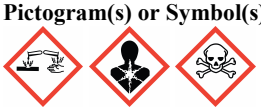
Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Acute toxicity (Oral): Category 3 Acute toxicity (Dermal): Category 3 Acute toxicity (Inhalation - vapor): Category 3 Skin Corrosion/Irritation: Category 1 Serious Eye Damage/Eye Irritation: Category 1 Germ Cell Mutagenicity: Category 2 Specific Target Organ Toxicity - Repeated Exposure: Category 2

Signal Word DANGER

Hazard Statement(s) Toxic if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. Toxic if inhaled. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.

Response If exposed: Immediately call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Wash with plenty of water. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition/Information on Ingredients

Substance/Mixture Mixture
Components Phenol Liquified USP
% By Weight 100
CAS# 108-95-2
Molecular Weight 94.11 g/mole
Chemical Formula C6H5OH
Synonym(s) Carbolic Acid.

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Phenol Liquified USP	108-95-2	85-100		
Water	7732-18-5	0-15		

Section 4: First-Aid Measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.

Skin Contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Eye Contact Call a physician or poison control center immediately. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion If swallowed: Immediately call a poison center or doctor/physician. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Symptoms/Effects

Acute Not available

Delayed Not available.

Immediate Medical Attention

Provide general supportive measures and treat symptomatically. Treatment for phenol overdose may include the following: For skin exposure, first rinse with polyethylene glycol 300 to 400 or isopropanol, then wash with soapy water for at least 10 minutes. Water alone may be harmful. For inhalation exposure, monitor for respiratory distress, administer oxygen, and assist ventilation as needed. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Evaluate with frequent arterial blood gas or pulse oximetry monitoring. Onset of acute lung injury may be delayed. If ingested, do not induce vomiting. Dilution may enhance absorption and should be avoided. Perform gastric lavage with 40% aqueous Bacto-Peptone, milk, or water followed by castor oil or vegetable oil. Activated charcoal may limit toxicity but could interfere with endoscopic evaluation of gastrointestinal burns. Support respiratory and cardiovascular function. Obtain CBC, electrolytes, urinalysis, and baseline renal and liver measurements. Monitor acid-base balance. Institute continuous cardiac monitoring. For methemoglobinemia, administer methylene blue intravenously. For seizures, administer a benzodiazepine IV. If seizures recur, consider phenobarbital or propofol. For hypotension, infuse isotonic fluid. If persistent, administer dopamine or norepinephrine. For ventricular tachycardia, lidocaine or amiodarone are generally first-line agents. Unstable rhythms require cardioversion.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding materials

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard

Firefighters Special Equipment and Precautions

Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials

Section 6: Accidental Release Measures

Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Methods and materials for containment and cleaning up: For waste disposal, see section 13 of the SDS. Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Handling: As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Combustible dust clouds may be created where operations produce fine material (dust). Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential Storage: Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL 19 mg/m3, 5 ppm US. ACGIH Threshold Limit Values TWA 5 ppm US. NIOSH: Pocket Guide to Chemical Hazards Ceiling 60 mg/m3, 15.6 ppm TWA 19 mg/m3, 5 ppm ACGIH Biological Exposure Indices 250 mg/g Phenol with hydrolysis Creatinine in urine
Engineering Controls	For laboratory operations, use good technique and limit open handling. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.
Personal Protection	Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene considerations: Handling practices in this SDS are recommendations for laboratory use of reference standards. Procedures for any other uses or quantities should be determined after an appropriate assessment.

Section 9: Physical and Chemical Properties

Appearance	Colorless. White. light pink solid. Crystals. Flakes.
Odor	Characteristic sweet, acrid odor.
Odor Threshold	0.06 ppm (detectable) (AIHA)

Melting Point	104 - 109.4 °F (40 - 43 °C)	**pH**	Not available.
Freezing Point	Not available.	**Vapor Pressure**	0.35 mm Hg (at 25 ° C)
Boiling Point/Range	< 0.01 (butyl acetate = 1)	**Vapor Density**	3.24 (air = 1)
Decomposition temperature	Not available.	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	1.46	**Evaporation Rate**	< 0.01 (butyl acetate = 1)
Flash Point	Not available.	**Autoignition temperature**	1319 °F (715 °C)
Flammability	Not available.	**Flammability or Explosive Limits:**	
		Lower	> 1.3 %
		Upper	8.6 %

Solubility(ies)	Soluable in water.
Other	Alcohol: Very soluble. Aqueous alkali hydroxides: Very soluble. Benzene: Soluble. Carbon disulfide: Very soluble. Chloroform: Very soluble. Ether: Very soluble. Glycerol: Very soluble. Petroleum ether: Almost insoluble. hemical family Phenol. Molecular formula C6H6O Molecular weight 94.11 Percent volatile 0 % pH in aqueous solution 6

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions.
Hazardous Polymerization	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	Contact with incompatible materials
Incompatible Materials	Acids. Strong oxidizing agents. Calcium hypochlorite. Aluminum. Isocyanates.. Caustic solutions. Sodium nitrite. Aliphatic amines. Aluminum chloride. Butadiene. Nitrobenzene.
Hazardous Decomposition Products	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS SJ3325000

Acute Toxicity
Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Acute Dermal LD50 Rabbit 630 mg/kg Rat 669 mg/kg, 525 mg/kg Inhalation LC50 Rat 0.316 mg/l Oral LD50 Rat 317 mg/kg

Skin Corrosion/Irritation
Causes severe skin burns.

Serious Eye Damage/Irritation
Causes serious eye damage

Respiratory or Skin Sensitization
Not available.

Germ Cell Mutagenicity
Suspected of causing genetic defects.

Carcinogenicity
Not available.

Reproductive Toxicity
Not available.

Routes of Entry
Inhalation. Skin. Eye. Ingestion.

Symptoms Related to Exposure
Burning in mouth, throat, and/or stomach. Cough. Gastrointestinal disturbances. Loss of appetite. Dark urine. Rapid breathing. Difficulty breathing. Headache. Fast heartbeat. Excitement. Skin discoloration. Weight gain. Muscle pain. Insomnia. Blue or pale lips, fingernails, and skin. Stupor. Seizures

Potential Health Effects
Not available.

Target Organ(s) May cause damage to organs through prolonged or repeated exposure.

Section 12: Ecological Information

Ecotoxicity
Aquatic Crustacea EC50 Water flea (Daphnia obtusa) 4.7 - 6.4 mg/l, 48 hoursWater flea (Daphnia obtusa) Fish LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) 7.7 mg/l, 96 hours

Persistance and Degradability
Not available.

Bioaccumulative Potential
Octanol/water partition coefficient log Kow 1.46

Mobility in Soil
Not available

Other Adverse Effects
Not available.

Section 13: Disposal Considerations

Waste Disposal
Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Disposal of Container
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations
Not available.

Section 14: Transport Information

DOT Classification
DOT: Proper Shipping Name- Phenol Solution Hazard Class- 6.1 UN-No- 2821 Packing Group- II IATA: UN-No- 2821 Proper Shipping Name- Phenol Solution Hazard Class- 6.1 Packing Group- II

Section 15: Regulatory Information

Regulations

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200 Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Phenol (CAS 108-95-2) Listed. SARA 304 Emergency release notification PHENOL (CAS 108-95-2) 1000 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. SARA 302 Extremely hazardous substance Superfund Amendments and Reauthorization Act of 1986 (SARA) Chemical name CAS number Reportable quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity, lower value (pounds) Threshold planning quantity, upper value (pounds) Phenol 108-95-2 1000 500 10000 YesSARA 311/312 Hazardous chemical Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Germ cell mutagenicity Specific target organ toxicity (single or repeated exposure) Classified hazard categories SARA 313 (TRI reporting) Chemical name % by wt.CAS number Phenol 100108-95-2 Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Phenol (CAS 108-95-2) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Hazardous substance Priority pollutant Toxic pollutant Clean Water Act (CWA) Section 112(r) (40 CFR 68.130) Not regulated.Safe Drinking Water Act (SDWA) FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace Phenol (CAS 108-95-2) Low priority California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. US state regulations California Proposition 65 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)) Phenol (CAS 108-95-2)

Other

Not available.

Section 16: Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Ruger Chemical Co., Inc. 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, howsoever arising, even if Ruger Chemical Co., /nc. has been advised of the possibility of such damages.