

## Safety Data Sheet

### SECTION 1: Identification

<b>Product Name</b>	Phenol, ACS Reagent Crystal		
<b>Other Identifiers</b>	Carbolic Acid; Hydroxybenzene; Phenic Acid; 84410-49		
<b>Recommended Uses</b>	General Laboratory Reagent/Chemical.		
<b>Uses Advised Against</b>	Not intended for drug, food or household use.		
<b>Address</b>	SPEX CertiPrep, LLC 203 Norcross Ave. Metuchen, NJ 08840 USA		<b>24-Hour Emergency Telephone</b>
<b>Telephone</b>	1.732.549.7144		CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1 + 730-527-3887
<b>Website</b>	www.spex.com		

### SECTION 2: Hazard(s) Identification

Acute toxicity Dermal (Category 3)  
Acute toxicity Oral (Category 4)  
Serious eye damage/eye irritation (Category 1)  
Skin corrosion/irritation (Category 1)  
Germ cell mutagenicity (Category 2)

#### Hazards not otherwise classified or covered by GHS

None identified.

#### Signal Word

DANGER

#### Hazard Statements

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and serious eye damage. Suspected of causing genetic defects.

#### Precautionary Statements

Obtain, read and follow all safety instructions before use. Do not breathe mist, vapors or spray. Wash areas of contact/exposure thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and clothing and eye protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical help. IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes. Wash contaminated clothing before reuse. Get emergency medical help immediately. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. Get medical help. In all cases of contact: Get emergency medical help immediately. IF exposed or concerned, get medical advice. Store locked up. Dispose of contents/container in accordance with local, state, federal and international regulations.



### SECTION 3: Composition / Information on Ingredients

Component Name	Component Number CAS	Component Number EC	Component Weight %
Phenol	108-95-2	203-632-7	100

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### SECTION 4: First-Aid Measures

<b>General Advice</b>	Show this SDS to attending physician if medical treatment is needed.
<b>Skin Contact</b>	Immediately flush affected area with plenty of water while removing contaminated clothing . Seek medical attention if you are concerned or feel unwell.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. Seek immediate medical attention.
<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or physician. Ensure that the patient/victim has an unobstructed airway. If shortness of breath occurs or breathing is difficult, administer oxygen. If breathing has ceased provide artificial respiration. Always use a barrier or bag-valve-mask device. DO NOT GIVE MOUTH-TO-MOUTH RESPIRATION.
<b>Ingestion</b>	Immediately call a poison center or physician. Induce vomiting only if advised by medical personnel to do so. Keep victim at rest in a comfortable position for breathing.
<b>Symptoms/effects</b>	The most important known symptoms/effects are described in Section 2 of this Safety Data Sheet.
<b>Treatment</b>	Treat symptomatically.

### SECTION 5: Fire-Fighting Measures

<b>Extinguishing Media</b>	Substance is not flammable, use agent most appropriate to extinguish surrounding fire (water, carbon dioxide, dry chemical, sand/earth, foam).
<b>Specific Hazards</b>	Thermal decomposition may produce toxic or irritating fumes.
<b>Actions for Firefighters</b>	Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### SECTION 6: Accidental Release Measures

<b>Precautions and Procedures</b>	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate unprotected personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Environmental Precautions</b>	Take all precautions to avoid release to the environment .
<b>Containment and Clean Up</b>	Avoid dust formation. Wear respiratory protection, gloves, eye protection and protective clothing. Sweep up or vacuum up spillage and collect in suitable lidded container for disposal.

### Section 7: Handling and Storage

<b>Handling</b>	Follow good hygiene procedures when handling chemical materials. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use personal items when handling this substance. Wear gloves, protective clothing and eye protection when handling this substance.
<b>Storage</b>	Keep containers tightly closed in a cool, dry and well-ventilated place. Protect from freezing and physical damage. Store separately from incompatible materials. Store locked up.

### Section 8: Exposure Controls / Personal Protection

<b>Engineering Controls</b>	As part of safe chemical handling , emergency eye wash fountains and safety showers should be available in handling areas. Provide sufficient ventilation measures to keep the airborne concentration below the applicable workplace exposure limits.
<b>Exposure Limits</b>	Phenol PEL-TWA 19 mg/m <sup>3</sup> US-OSHA
<b>Exposure Limits</b>	Phenol REL-TWA 5 ppm US-NIOSH
<b>Exposure Limits</b>	Phenol TLV-TWA 5 ppm US-ACGIH
<b>Exposure Limits</b>	Phenol Ceiling 15.6 ppm (15 minute) US-NIOSH
<b>Eye Protection</b>	Wear safety glasses with side shields or safety goggles. Wear face shield if there is risk of splashes.
<b>Skin Protection</b>	Wear chemical resistant gloves and protective clothing.
<b>Respiratory Protection</b>	Where exposure limits are exceeded and cannot be adequately controlled by other engineering means (such as a chemical fume hood), wear respiratory protection.

### Section 9: Physical and Chemical Properties

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Physical State	Solid
Appearance/Color	Colorless to pink
Odor	Sweetly acrid, tarry
Odor Threshold	0.5 - 5 ppm
Melting/Freezing Point	40.9°C
Boiling Point/Range	181.8°C
Flammability	Flammable
Flammable/Explosive Limits	1.8 - 8.6%
Flash Point	79°C
Auto-Ignition Temperature	715°C
Decomposition Temperature	Data not available
pH	6
Viscosity	Not applicable.
Solubility (in water)	Phenol is liquefied by mixing with approximately 8% water
Partition Coefficient (n-octanol/water)	1.47
Relative Density	1.07
Vapor Pressure	Not applicable
Vapor Density	Not applicable.
Evaporation Rate	Not applicable.
Particle Characteristics	Data not available

### Section 10: Stability and Reactivity

Reactivity	Mixtures with peroxysulfuric acids explode.
Chemical Stability	Stable under normal conditions of handling and storage.
Hazardous Reactions	Based on available data, no reaction hazards have been identified that would occur during normal handling and storage.
Conditions to Avoid	Avoid contact with incompatible materials.
Incompatible Materials	Aluminum chloride with nitrobenzene, nitromethane, butadiene, formaldehyde, sodium nitrite; sodium nitrate with trifluoroacetic acid; peroxodisulfuric acid, peroxomonsulfuric acid.
Hazardous Decomposition	Thermal decomposition can produce carbon oxides.

### Section 11: Toxicological Information

Acute Toxicity - Oral	LD50 (rat) 317 mg/kg
Acute Toxicity - Dermal	LD50 (rabbit) 630 mg/kg
Acute Toxicity - Inhalation	LC50 (rat) 316 mg/m³
Skin Corrosion/Irritation	Toxic in contact with skin. Causes severe skin damage.
Eye Damage/Irritation	This material can cause serious eye damage.
Respiratory Sensitization	Not expected to cause respiratory sensitization.
Skin Sensitization	Not expected to cause skin sensitization.
Germ Cell Mutagenicity	Based on available data, this substance is suspected of causing germ cell mutagenicity.
Carcinogenicity	This substance contains a chemical that is not classifiable as to its carcinogenicity to humans in IARC studies.
Reproductive Toxicity	Based on available data, this substance does not meet the criteria set forth for classification as a reproductive toxin.
STOT Single Exposure	None known.
STOT Repeated Exposure	None known.
Aspiration Hazard	This substance is not considered to be an aspiration hazard.
Other Information	No additional information available.

## Section 12: Ecological Information

<b>Toxicity Values</b>	LC50 (Crangon crangon) 172 mg/L/24H
<b>Persistence/Biodegradability</b>	Expected to biodegrade.
<b>Bioaccumulation Potential</b>	BCF 17.38 (low potential for bioaccumulation).
<b>Mobility in Soil</b>	Expected to have high mobility in soil (Koc values are generally < 100).
<b>Other Adverse Effects</b>	None known.

## Section 13: Disposal Considerations

Discharge, treatment, or disposal may be subject to national, state, regional or local laws. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Since emptied containers retain product residue, follow label warnings even after container is emptied. Dispose in accordance with national, state, regional and local regulations.

## Section 14: Transport Information

<b>UN Number</b>	UN1671
<b>Proper Shipping Name, Hazard Class</b>	PHENOL, SOLID, 6.1
<b>Packing Group</b>	II
<b>Marine Pollutant</b>	Not classified as a marine pollutant.

## Section 15: Regulatory Information

<b>USA TSCA</b>	On or in compliance with the inventory.
<b>USA SARA 302/304</b>	Phenol (EHS), TPQ 227 kg (500 lbs), RQ 454 kg (1000 lbs)
<b>USA SARA 311/312</b>	Phenol (EHS)
<b>USA SARA 313 (TRI)</b>	Phenol (EHS)
<b>Canada DSL/NDSL</b>	On or in compliance with DSL.
<b>California Proposition 65</b>	This product contains no substances on the list.

## Section 16: Other Information

<b>Acronyms</b>	ACGIH	American Conference of Governmental Industrial Hygienists (USA)
	ATE	Acute Toxicity Estimate (calculated toxicity value)
	BCF	Bioconcentration Factor
	CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (USA)
	DOT	Department of Transportation (USA)
	DSL	Domestic Substances List (Canada)
	EHS	Extremely Hazardous Substance
	EPA	Environmental Protection Agency (United States)
	GHS	Globally Harmonized System
	IARC	International Agency for Research on Cancer
	IDLH	Immediately Dangerous to Life and Health
	NTP	National Toxicology Program (USA)
	OSHA	Occupational Safety and Health Administration (USA)
	PEL	Permissible Exposure Limit
	PNOR	Particulates Not Otherwise Classified
	PPE	Personal Protective Equipment
	ppb	Parts per billion
	ppm	Parts per million
	RQ	Reportable Quantity
	SARA	Superfund Amendments and Reauthorization Act (USA)
	TLV	Threshold Limit Value
	TPQ	Threshold Planning Quantity
	TRI	Toxic Release Inventory (USA)
	TSCA	Toxic Substances Control Act (USA)
	TWA	Time Weighted Average
	UN	United Nations

**Revision Date** 03/30/22 **Issue Date:** 3/30/2022

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Department issuing SDS:** product safety department

**Contact:** SPEX CertiPrep, LLC. 1-732-549-7144