



Material Safety Data Sheet Phenol Standard, 1000 ppm (1mL=1mg)

Section 1 - Chemical Product and Company Identification

MSDS Name:

Phenol Standard, 1000 ppm (1mL=1mg)

Catalog Numbers:

LC18330

Synonyms:

Carbolic acid standard

Company Identification:

LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300 or
011-703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
108-95-2	Phenol	0.1

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution

Caution! Causes severe eye and skin irritation. May cause respiratory and gastrointestinal irritation. May cause central nervous system depression. May cause liver and kidney damage. May cause reproductive and fetal effects. May cause tumors based on animal studies.

Target Organs: Blood, kidneys, central nervous system, liver, eyes, skin

Potential Health Effects

Eye:

Causes severe eye irritation.

Skin:

May cause severe skin irritation. Readily absorbed through the skin.

Ingestion:

May cause central nervous system depression with dizziness, drowsiness, headache, and nausea.
May cause liver and kidney damage. May cause gastrointestinal irritation.



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Inhalation:

Causes irritation of the respiratory tract. May cause headache, nausea, and vomiting. Severe exposure may cause convulsions and pulmonary edema. Effects may be delayed.

Chronic:

May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects and the development of tumors. Repeated skin contact may cause dermatitis with dark pigmentation of the skin.

Section 4 - First Aid Measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

Ingestion:

Do not induce vomiting. Give conscious victim 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Move victim to fresh air immediately. If breathing is difficult, administer oxygen. Give artificial respiration if necessary, using a mechanical device such as a bag and mask or one-way valve. Get medical aid at once.

Notes to Physician:

Persons with liver or kidney disease should not be exposed to phenol for any length of time.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

715°C (1319°F)

Flash Point:

79.4°C (174.9°F) (for 90% concentration)

NFPA Rating:

CAS# 108-95-2: Health- 4, Flammability- 2, Instability- 0

CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0

Explosion Limits:

Lower: 1.8 Upper: 8.6



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Do not expose product or empty containers to heat, sparks, or flame.

Storage:

Store in a tightly closed container in a cool, dry place. Protect from light and incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities using or storing this material should be equipped with an eyewash and safety shower. Provide local exhaust or general dilution ventilation to keep airborne levels below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	No exposure limits listed	No exposure limits listed	No exposure limits listed
Phenol	5 ppm TWA	5 ppm TWA 250 ppm IDLH	5 ppm TWA 19 mg/m ³ TWA

OSHA Vacated PELs:

Phenol: 5 ppm TWA, 19 mg/m³ TWA

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.



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Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Colorless
Odor:	Slight phenolic odor
pH:	pH 6-7
Vapor Pressure:	Not available
Vapor Density:	3.2
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.0
Molecular Formula:	C ₆ H ₅ OH
Molecular Weight:	94.1

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible substances, light, ignition sources, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents, isocyanates, acetaldehyde, calcium hypochlorite, peroxomonosulfuric acid, nitrobenzene, sodium nitrite, aluminum chloride, peroxydisulfuric acid, 1,3-butadiene, boron trifluoride diethyl ether.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 108-95-2: SJ3325000

CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 108-95-2:

Inhalation, rat: LC50 = 316 mg/m³/4H

Oral, rat: LD50 = 317 mg/kg

Skin, rat: LD50 = 669 mg/kg

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg

Carcinogenicity:

CAS# 108-95-2: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.



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CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA, or California Proposition 65.

Epidemiology:

See actual entry in RTECS for complete information.

Teratogenicity:

See actual entry in RTECS for complete information.

Reproductive:

See actual entry in RTECS for complete information.

Mutagenicity:

See actual entry in RTECS for complete information.

Neurotoxicity:

Not available

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal

TSCA:

CAS# 108-95-2 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 108-95-2: Final RQ= 1000 lb. (454 Kg)

CERCLA/SARA Section 313:

Phenol is not at a high enough concentration to be reportable under Section 313.

OSHA - Highly Hazardous:

None of the components are on this list.



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US State

State Right to Know:

Phenol can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:

None

European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 108-95-2 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 108-95-2 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 17, 1997

Revision Date: September 17, 2010

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