



Material Safety Data Sheet Sodium Phenate Solution

Section 1 - Chemical Product and Company Identification

MSDS Name:

Sodium Phenate Solution

Catalog Numbers:

LC24770

Synonyms:

Sodium phenate solution, APHA (for nitrogen)

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	8.3
1310-73-2	Sodium hydroxide	3.2

Section 3 - Hazards Identification

Emergency Overview

Appearance: clear, colorless to dark amber solution (darkens over time)

Danger! May cause eye and skin burns. May cause severe respiratory and digestive tract irritation with possible burns. May be absorbed through skin. May cause central nervous system depression. May cause liver and kidney damage.

Target Organs: eyes, skin, respiratory tract, liver, kidneys, blood, central nervous system.

Potential Health Effects

Eye:

May cause eye burns.

Skin:

May cause skin burns. May be harmful or fatal if absorbed through skin.

Ingestion:

May cause digestive tract burns with swelling of the throat, convulsions, and possible coma. May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause



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collapse, unconsciousness, coma and possible death due to respiratory failure. Overexposure may cause methemoglobinemia, which is characterized by dizziness, drowsiness, headache, shortness of breath, cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), rapid heart rate and chocolate-brown colored blood. May cause cardiac abnormalities. Toxic if swallowed.

Inhalation:

May cause severe irritation to respiratory tract. Toxic if inhaled. May cause nausea, vomiting, diarrhea, weakness, darkened urine, headache, sweating, convulsions, fatigue, unconsciousness, pulmonary edema & coma.

Chronic:

Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. May cause reproductive and fetal effects. Effects may be delayed. Laboratory experiments have resulted in mutagenic effects. Repeated skin contact may cause dermatitis with dark pigmentation of the skin. Animal studies have reported the development of tumors.

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. If victim is conscious, give 2-4 glasses of water to dilute alkali. Get medical aid at once.

Inhalation:

Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask. Get medical aid at once.

Notes to Physician:

Treat symptomatically and supportively.

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.

Extinguishing Media:

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

Autoignition Temperature:

605°C (1121°F) (for phenol)

Flash Point:

79°C (174°F) (for phenol)

NFPA Rating:

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

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

CAS# 1310-73-2: Health- 3, Flammability- 0, Instability- 1.



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Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in suitable containers labeled for later disposal. Keep out of sewers and drains. Material may be carefully neutralized to pH 7 with citric acid or other suitable neutralizing agent.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Keep from contact with oxidizing materials.

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	None of the components are on this list	None of the components are on this list	None of the components are on this list
Phenol	5 ppm TWA skin - potential for cutaneous absorption	5 ppm TWA 19 mg/m ³ TWA 250 ppm IDLH	5 ppm TWA 19 mg/m ³ TWA
Sodium hydroxide	None of the components are on this list	2 mg/m ³ TWA	None of the components are on this list

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 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.



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Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State:	Clear liquid
Color:	Colorless to dark amber
Odor:	Slight phenolic odor
pH:	Alkaline
Vapor Pressure:	No information found.
Vapor Density:	No information found.
Evaporation Rate:	No information found.
Viscosity:	No information found.
Boiling Point:	No information found.
Freezing/Melting Point:	No information found.
Decomposition Temperature:	No information found.
Solubility in water:	Soluble
Specific Gravity/Density:	No information found.
Molecular Formula:	No information found.
Molecular Weight:	No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. Solution darkens over time.

Conditions to Avoid:

Incompatible materials, light, ignition sources, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents, acids, aluminum, halogens, magnesium, nitric acid, zinc, isocyanates, acetaldehyde, nitrides (e.g. potassium nitride, sodium nitride), peroxomonosulfuric acid, calcium hypochlorite, lead, nitrobenzene, sodium nitrite, aluminum chloride, peroxydisulfuric acid, 1,3-butadiene, boron trifluoride diethyl ether.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, toxic fumes of sodium oxide.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 108-95-2: SJ3325000.

CAS# 1310-73-2: WB4900000.



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LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 108-95-2:

Inhalation, rat: LC50 = 316 mg/m³

Oral, rat: LD50 = 317 mg/kg

Skin, rat: LD50 = 669 mg/kg.

CAS# 1310-73-2:

No information found.

Carcinogenicity:

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

CAS# 108-95-2: IARC: Group 3 (not classifiable)

CAS# 1310-73-2: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

Phenol is not considered carcinogenic to rats or mice following oral exposure in drinking water. It was found to be a promoter of skin cancer in mice.

Teratogenicity:

May cause reproductive and fetal effects.

Reproductive:

May cause reproductive and fetal effects.

Mutagenicity:

Laboratory experiments have resulted in mutagenic effects.

Neurotoxicity:

No information found

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



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US Federal

TSCA:

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

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

CAS# 1310-73-2 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 108-95-2: final RQ = 1000 pounds (454 kg)

CAS# 1310-73-2: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313:

This material contains Phenol (CAS# 108-95-2, 8.3%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

None of the components are on this list.

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.

Sodium hydroxide 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/NDL:

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

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

CAS# 1310-73-2 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.

CAS# 1310-73-2 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: June 25, 1998

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