

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 586.00

Revision Date: March 14, 2001

Section 1 — Chemical Product and Company Identification

Phenol

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Phenol

Synonyms: carboic acid, hydroxybenzene

CAS#: 108-95-2

Section 3 — Hazards Identification

White crystalline mass or loose crystals or liquefied. Disinfectant-like odor.
Highly toxic by ingestion, inhalation, or skin contact. Severe body tissue irritant.
Contact with phenol may cause a severe blistering skin effect. Phenol in contact with more than 100 sq. in. of skin is absorbed so quickly that it may be fatal in 90 seconds.
Avoid all body tissue contact.
Combustible solid.

FLINN AT-A-GLANCE

Health-3
Flammability-1
Reactivity-1
Exposure-3
Storage-3

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give no more than 1-2 cups of water for dilution. Do not induce vomiting. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Combustible solid.

Phenol, when heated, forms explosive mixtures with air.

Flash Point: 175 F Upper: 8.6% Lower: 1.7% Autoignition Temperature: 1319 F

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

H-3
F-2
R-0

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Sweep up (if liquid, contain spill with sand and absorbent material), place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #8. Store with phenols and cresols. Store in a poisons cabinet.

Store in a Flinn Chem-Saf bag. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 5 ppm (OSHA)

Section 9 — Physical and Chemical Properties

White crystalline mass or loose crystals or liquefied.
Disinfectant-like odor.
Soluble in water and several organic solvents including alcohol.
Formula: C₆H₅OH
Formula Weight: 94.11

Specific Gravity: 1.07
Melting Point: 42.5-43 C
Boiling Point: 182 C
Vapor Pressure: 0.36mm (20 C)
Vapor Density: 3.24

Section 10 — Stability and Reactivity

Avoid contact with strong oxidizing agents, strong bases, strong acids.
Shelf Life: Fair to poor. Changes color on exposure to light; absorbs water from air and liquifies.

Section 11 — Toxicological Information

Acute effects: Highly toxic, vesicant
Chronic effects: Dermatitis
Target organs: Liver, kidneys, nervous system, spleen

ORL-RAT LD50: 317 mg/kg
IHL-RAT LC50: 316 mg/m³
SKN-RBT LD50: 669 mg/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations.
Flinn Suggested Disposal Method #24a is one option.

Section 14 — Transport Information

Shipping Name: Phenol, solid
Hazard Class: 6.1, Poison
UN Number: UN1671

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (203-632-7), RCRA code U188.

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

*Reduce Science Accidents--
Use Flinn Chemicals*

flinn@flinnsci.com www.flinnsci.com
P.O. Box 219 Batavia IL 60510
(800) 452-1261 Fax (866) 452-1436