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Safety Data Sheet

Version 1.0
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Phenol
 Synonyms : Hydroxybenzene
 Distributor : 733 Third Avenue. Fl. 20
 New York, NY 10017
 USA
 Emergency Contact : 212-752-2020
 Chemtel Phone# : 1-800-255-3924
 International Phone # : +01-813-248-0585

2. HAZARDS IDENTIFICATION

Emergency Overview

Causes skin burns. Harmful if absorbed through the skin. Harmful if swallowed. Causes eye irritation. Causes respiratory tract irritation. Combustible liquid and vapor.

GHS Classification

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Germ cell mutagenicity (Category 2), H341

Specific target organ toxicity - repeated exposure (Category 2), H373

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H331: Toxic if inhaled.

H341: Suspected of causing genetic defects.

H373: May cause damage to kidneys, liver, skin, and nervous system, through prolonged or repeated exposure.

Precautionary statement(s)

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P262: Do not get in eyes, on skin, or on clothing.

P273: Avoid release to the environment.

2. HAZARDS IDENTIFICATION...cont'd

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or Doctor

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P281: Use personal protective equipment as required.

P302+P352: IF ON SKIN: Wash with plenty of soap and water

P501: Dispose of contents/ container to an approved waste disposal plant.

P405: Store locked up.

Potential Health Effects

Eye Contact:

May cause severe corneal damage and corrosion of eyes if not washed immediately and thoroughly. Immediately washing decreases the severity of ocular effects.

Skin Contact:

Liquid is readily absorbed through the skin and results in irritation and necrosis. Exposure may result in cardiac arrhythmias. Phenol vapors are readily absorbed through the skin.

Inhalation:

Severely irritating. Excessive Inhalation of vapors may cause nasal and respiratory irritation and central nervous system effects including dizziness, weakness, fatigue, headache, possible unconsciousness, and even death.

Ingestion:

Toxic. Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Subchronic/Chronic Hazards:

Repeated overexposure may cause damage to kidneys and liver.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	CAS Number	% (Wt./Wt.)
Phenol	000108-95-2	100

4. FIRST AID MEASURES

Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.
Skin Contact:	Flush skin with plenty of Polyethylene Glycol (PEG) or large quantities of water. Obtain medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.
Ingestion:	If swallowed, get medical attention immediately. Only induce vomiting if directed by a physician. Never give anything by mouth to an unconscious person.

5. FIREFIGHTING MEASURES

Flash Point: 176°F

Flash Point Method: Closed Cup

Lower Explosive Limit: 1.7 vol %

Upper Explosive Limit: 8.6 vol %

OSHA Flammability Classification: Combustible Liquid

Autoignition Temperature: 716°C

Other Flammable Properties: Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

Extinguishing Media: Use water spray or fog, alcohol resistant foam, dry chemical, or CO₂

Fire Fighting Procedures: Containers can build up pressure if exposed to heat (fire). Cool with water spray. As in any fire, wear self-contained, pressure-demand breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Absorb spill with inert material, then place in a chemical waste container. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Remove sources of ignition and ventilate area. Use a respirator and other protective equipment as outlined in Section 8. Obey relevant local, state, and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater, or soil.

7. HANDLING AND STORAGE

Handling:

Keep away from heat. Keep away from sparks, flames, and other sources of ignition. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage:

Store in a cool, dry place. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Permissible Exposure Limits

	Value	Limit	Reference
Phenol	5 ppm (skin)	TWA	OSHA/ACGIH
	15.6 ppm	STEL/REL	NIOSH

Other exposure limit information:

The IDLH is 250 ppm.

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne exposure.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION...cont'd

Respiratory Protection:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Eye Protection:

Use chemical splash goggles.

Skin Protection:

Personal protective equipment to prevent dermal exposure is recommended.

Other Protective Equipment:

There is evidence that PEG may be more effective than water for decontaminating skin. Therefore, it is recommended PEG be made available in areas where skin exposures to phenol are possible. A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure	:	0.3 mbar @ 20°C
Vapor Density (Air=1)	:	Is heavier than air
Specific Gravity	:	1.07
Boiling Point	:	182°C
Freezing Point	:	40-41°C
pH	:	4-5 @ 20°C
Evaporation Rate	:	Not available
Solubility in Water	:	87.5g/l @ 25°C

Other Properties:

Colorless. Liquid. Acrid odor. Solubility in water: Complete (miscible).

10. STABILITY AND REACTIVITY

Stability:

This product is stable under normal storage conditions.

Hazardous Polymerization:

Will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Chemical Name	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Phenol	340 mg/kg	850 mg/kg	310-316 mg/m ³

Other Toxicological Information:

No information available.

12. ECOLOGICAL INFORMATION
Aquatic Toxicity Data

LC50 (Fish) : 5-12 mg/96h
 EC10 (Bacteria): 10-30,000 mg/l
 EC50 (Daphnia): 7.5-100 mg/l

Ecological Information:

No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Method: Waste must be disposed of in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION
DOT (US)

UN number: 2312 Class: 6.1 Packing group: II
 Proper shipping name: Phenol, molten
 Reportable Quantity (RQ): 1000
 Marine pollutant: No

IMDG

UN number: 2312 Class: 6.1 Packing group: II EMS-No: F-A, S-A
 Proper shipping name: PHENOL, MOLTEN
 Marine pollutant: No

IATA

UN number: 2312 Class: 6.1 Packing group: II
 Proper shipping name: Phenol, molten

15. REGULATORY INFORMATION

This product contains the following non-hazardous components:

No non-hazardous components exist

U.S. Federal Regulations

OSHA:

This document has been prepared in accordance with the SDS requirements of OSHA Hazard Communication Standard.

Clean Air Act Section 112:

This product contains the following components present at or above the OSHA de minimus level and listed as Hazardous Air Pollutants:

	CAS Number	Wt. %
Phenol	000108-95-2	100

This product contains the following components present at or above the OSHA de minimus level and listed as Extremely Hazardous Air Pollutants:

	CAS Number	Wt. %
Phenol	000108-95-2	100

SARA Section 302:

This product contains the following components listed as Extremely Hazardous Substances:

	CAS Number	Wt. %
Phenol	000108-95-2	100

15. REGULATORY INFORMATION...cont'd

SARA Section 311/312:

Hazard Classifications: Immediate (acute), Fire

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

	CAS Number	Wt. %
Phenol	000108-95-2	100

TSCA:

This product or its components are listed in or exempt from the TSCA inventory requirements.

This product contains the following non-proprietary substances subject to export notification under Section 12 (b) of TSCA:

	CAS Number	
Phenol	000108-95-2	Reportable one-time

State Regulations

New Jersey:

This product contains the following non-hazardous components subject to disclosure under New Jersey Right-to-Know legislature:

None

Pennsylvania:

This product contains the following non-hazardous components subject to disclosure under Pennsylvania Right-to-Know legislation:

None

California (Proposition 65):

This product contains the following substances known to the State of California to cause cancer:

None

This product contains the following substances known to the State of California to cause adverse reproductive effects:

None

International Regulations

Summary of International Chemical Inventory Status:

Canada	On inventory
Europe	On inventory
South Korea	On inventory
Australia	On inventory

16. OTHER INFORMATION

NFPA Ratings: Health – 3 Flammability – 2 Reactivity – 0
Ratings Key: 4 = Highest Hazard, 0 = Lowest Hazard, N = No rating for powders

Key to abbreviations used:

NA	Not Applicable
NAV	Not Available
NE	Not Established
NJTSR No.	New Jersey Trade Secret Registry Number
R	Registered Trademark of INEOS Phenol
TM	Trademark of INEOS Phenol

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Continental Industries Group, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.