

# MATERIAL SAFETY DATA SHEET


## Phenol

### Section 1 - Chemical Product and Company Identification

<b>MSDS Name:</b>	Phenol
<b>Synonyms:</b>	Hydroxybenzene; Carbolic acid
Company Identification: (INDIA)	Veritas House, 70 Mint Road, Fort, Mumbai - 400 001. INDIA
For information in the INDIA, call:	Tel: +91 - 22 - 2275 5555 / 6184 0000, Fax: +91 - 22 - 2275 5556 / 6184 0001

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
108-95-2	Phenol	99%	203-632-7

<b>Hazard Symbols:</b>	T C
	
<b>Risk Phrases:</b>	23/24/25 34 48/20/21/22 68

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Harmful : danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. Possible risk of irreversible effects.*

#### Potential Health Effects

<b>Eye:</b>	Causes eye burns.
<b>Skin:</b>	Causes skin burns. Toxic in contact with skin.
<b>Ingestion:</b>	Causes gastrointestinal tract burns. Toxic if swallowed.
<b>Inhalation:</b>	Causes chemical burns to the respiratory tract. Toxic if inhaled.
<b>Chronic:</b>	Possible risk of irreversible effects.

### Section 4 - First Aid Measures

<b>Eyes:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
<b>Skin:</b>	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure. SPEEDY ACTION IS CRITICAL!
<b>Ingestion:</b>	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
<b>Inhalation:</b>	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**

**Section 5 - Fire Fighting Measures**

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Will burn if involved in a fire. Combustible liquid.
<b>Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Section 6 - Accidental Release Measures**

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

**Section 7 - Handling and Storage**

<b>Handling:</b>	Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.
<b>Storage:</b>	Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area.

**Section 8 - Exposure Controls, Personal Protection**

<b>Engineering Controls:</b>	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
<b>Exposure Limits</b>	
	CAS# 108-95-2:
	United Kingdom, WEL - TWA: 2 ppm TWA United Kingdom, WEL - STEL: 6 ppm STEL
	United States OSHA: 5 ppm TWA; 19 mg/m <sup>3</sup> TWA
	Belgium - TWA: 2 ppm VLE; 7.8 mg/m <sup>3</sup> VLE
	France - VME: 2 ppm VME; 7.8 mg/m <sup>3</sup> VME
	Germany: 5 ppm TWA; 19 mg/m <sup>3</sup> TWA Germany: skin notation
	Japan: 5 ppm OEL; 19 mg/m <sup>3</sup> OEL
	Malaysia: 5 ppm TWA; 19 mg/m <sup>3</sup> TWA
	Netherlands: 2 ppm MAC; 8 mg/m <sup>3</sup> MAC
	Russia: 0.3 mg/m <sup>3</sup> TWA (vapour)
	Spain: 2 ppm VLA-ED; 8 mg/m <sup>3</sup> VLA-ED

**Personal Protective Equipment**

<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Mass
<b>Color:</b>	colorless
<b>Odor:</b>	sharp odor - sweetish odor
<b>pH:</b>	Not available
<b>Vapor Pressure:</b>	0.4mbar @20 deg C
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	182 deg C @760mmHg ( 359.60°F)
<b>Freezing/Melting Point:</b>	39 - 41 deg C
<b>Autoignition Temperature:</b>	605 deg C ( 1,121.00 deg F)
<b>Flash Point:</b>	79 deg C ( 174.20 deg F)
<b>Explosion Limits: Lower:</b>	1.3 Vol %
<b>Explosion Limits: Upper:</b>	9.5 Vol %
<b>Decomposition Temperature:</b>	Not available
<b>Solubility in water:</b>	8g/100ml
<b>Specific Gravity/Density:</b>	1.019 g/cc
<b>Molecular Formula:</b>	C6H6O
<b>Molecular Weight:</b>	94.11

## Section 10 - Stability and Reactivity

<b>Chemical Stability:</b>	Stable. Light sensitive. Hygroscopic: absorbs moisture or water from the air.
<b>Conditions to Avoid:</b>	Incompatible materials, light, exposure to moist air or water.
<b>Incompatibilities with Other Materials</b>	Strong oxidizing agents, bases, aluminum, halogens, magnesium, nitric acid, zinc, calcium hypochlorite, lead.
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide.
<b>Hazardous Polymerization</b>	Has not been reported.

## Section 11 - Toxicological Information

<b>RTECS#:</b>	CAS# 108-95-2: SJ3325000
<b>LD50/LC50:</b>	RTECS: <b>CAS# 108-95-2:</b> Draize test, rabbit, eye: 5 mg Severe; Draize test, rabbit, skin: 500 mg/24H Severe; Draize test, rabbit, skin: 100 mg Mild; Inhalation, mouse: LC50 = 177 mg/m3; Inhalation, mouse: LC50 = 177 mg/m3/4H; Inhalation, rat: LC50 = 316 mg/m3; Inhalation, rat: LC50 = 316 mg/m3/4H; Oral, mouse: LD50 = 270 mg/kg; Oral, rat: LD50 = 317 mg/kg; Oral, rat: LD50 = 512 mg/kg; Skin, rabbit: LD50 = 630 mg/kg; Skin, rat: LD50 = 669 mg/kg; Skin, rat: LD50 = 1500 mg/kg;
<b>Carcinogenicity:</b>	Phenol - IARC: Group 3 (not classifiable)
<b>Other:</b>	See actual entry in RTECS for complete information. Possible mutagen.

## Section 12 - Ecological Information

Not available

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

	IATA	IMO	RID/ADR
<b>Shipping Name:</b>	PHENOL, SOLID	PHENOL, SOLID	PHENOL, SOLID
<b>Hazard Class:</b>	6.1	6.1	6.1
<b>UN Number:</b>	1671	1671	1671
<b>Packing Group:</b>	II	II	II
USA RQ: CAS# 108-95-2: 1000 lb final RQ; 454 kg final RQ			

## Section 15 - Regulatory Information

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T C

#### Risk Phrases:

- R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- R 34 Causes burns.
- R 48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
- R 68 Possible risk of irreversible effects.

#### Safety Phrases:

- S 24/25 Avoid contact with skin and eyes.
- S 26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
- S 28A after contact with skin, wash immediately with plenty of water.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### WGK (Water Danger/Protection)

- CAS# 108-95-2: 2

#### Canada

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

#### US Federal

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

## Section 16 - Other Information

<b>MSDS Creation Date:</b>	July 25, 2015
<b>Revision #0 Date</b>	

*The Information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*