SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers
Product name: Phenol
CAS-No.: 108-95-2

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet
Company: Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi-10002
INDIA
Telephone: +91 11 49404040
Email: care@cdhfinechemical.com

1.4 Emergency telephone number
Emergency Phone #: +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Germ cell mutagenicity (Category 2), H341
Specific target organ toxicity - repeated exposure (Category 2), H373
Chronic aquatic toxicity (Category 2), H411

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

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram

Signal word: Danger
Hazard statement(s): Toxic if swallowed, in contact with skin or if inhaled
H301 + H311 + H331
H314 Causes severe skin burns and eye damage.
Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Vesicant., Rapidly absorbed through skin.

SECTION 3: Composition/information on ingredients

3.1 Substances
Synonyms : Hydroxybenzene
Formula : C₆H₆O
Molecular weight : 94.11 g/mol
CAS-No. : 108-95-2
EC-No. : 203-632-7
Index-No. : 604-001-00-2
Registration number : 01-2119471329-32-XXXX

Hazardous ingredients according to Regulation (EC) No 1272/2008
Component | Classification | Concentration
--- | --- | ---
Phenol | Acute Tox. 3; Skin Corr. 1B; | <= 100 %
| EC-No. | Chronic 2; H301, H331, H311, H314, H341, H373, H411
| Index-No. | >= 3 %: Skin Corr. 1B, H314;
| | 1 - < 3 %: Skin Irrit. 2, H315; 1
| | - < 3 %: Eye Irrit. 2, H319;

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

SECTION 4: First aid measures

4.1 Description of first aid measures
General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Carbon oxides

5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature 2 - 8 °C
Light sensitive. Handle and store under inert gas.
7.3 **Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection**

8.1 **Control parameters**

Components with workplace control parameters

8.2 **Exposure controls**

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties**

9.1 **Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>a) Appearance</th>
<th>Form: solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>c) Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>d) pH</td>
<td>6,0</td>
</tr>
<tr>
<td>e) Melting point/freezing point</td>
<td>Melting point/range: 38 - 43 °C</td>
</tr>
<tr>
<td>f) Initial boiling point and boiling range</td>
<td>182,0 °C</td>
</tr>
<tr>
<td>g) Flash point</td>
<td>79,0 °C - closed cup</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>j) Upper/lower flammability or explosive limits</td>
<td>Upper explosion limit: 8,6 %(V)</td>
</tr>
<tr>
<td></td>
<td>Lower explosion limit: 1,7 %(V)</td>
</tr>
<tr>
<td>k) Vapour pressure</td>
<td>6,3 hPa at 55,0 °C</td>
</tr>
<tr>
<td></td>
<td>0,5 hPa at 20,0 °C</td>
</tr>
</tbody>
</table>
l) Vapour density No data available
m) Relative density 1.07 g/cm³
n) Water solubility 84 g/l at 20 °C
o) Partition coefficient: n-octanol/water log Pow: 1.46
p) Auto-ignition temperature 715.0 °C
q) Decomposition temperature No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available

9.2 Other safety information
   Surface tension 38.2 mN/m at 50.0 °C

SECTION 10: Stability and reactivity

10.1 Reactivity
   No data available

10.2 Chemical stability
   Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
   No data available

10.4 Conditions to avoid
   No data available

10.5 Incompatible materials
   Strong oxidizing agents, Strong bases, Strong acids

10.6 Hazardous decomposition products
   Other decomposition products - No data available
   In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

   Acute toxicity
   LD50 Oral - Rat - 317.0 mg/kg
   Remarks: Behavioral: Convulsions or effect on seizure threshold.
   LC50 Inhalation - Rat - 8 h - 900 mg/m³
   LD50 Dermal - Rabbit - 630.0 mg/kg

   Skin corrosion/irritation
   Skin - Rabbit
   Result: Severe skin irritation - 24 h

   Serious eye damage/eye irritation
   Eyes - Rabbit
   Result: Corrosive
   (OECD Test Guideline 405)

   Respiratory or skin sensitisation
   No data available

   Germ cell mutagenicity
   In vitro tests showed mutagenic effects
Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Phenol)

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard
No data available

Additional Information
RTECS: SJ3325000
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonia, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Circulatory collapse, tachypnea, paralysis, Convulsions, Coma., necrosis of mouth and G.I. Tract, Jaundice, respiratory failure, cardiac arrest
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish
LC50 - Leuciscus idus (Golden orfe) - 14,00 - 25,00 mg/l - 48 h
LC50 - Carassius auratus (goldfish) - 36,10 - 68,80 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 56 mg/l - 48 h

Toxicity to algae
EC50 - Chlorella vulgaris (Fresh water algae) - 370,00 mg/l - 96 h

12.2 Persistence and degradability
Biodegradability Result: - Readily biodegradable

12.3 Bioaccumulative potential
Bioaccumulation Danio rerio (zebra fish) - 5 h
- 2 mg/l
Bioconcentration factor (BCF): 17,5
Remarks: Does not bioaccumulate.

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
Toxic to aquatic life with long lasting effects.
SECTION 14: Transport information

14.1 UN number
ADR/RID: 1671       IMDG: 1671       IATA: 1671

14.2 UN proper shipping name
ADR/RID: PHENOL, SOLID
IMDG: PHENOL, SOLID
IATA: Phenol, solid

14.3 Transport hazard class(es)
ADR/RID: 6.1        IMDG: 6.1        IATA: 6.1

14.4 Packaging group
ADR/RID: II         IMDG: II         IATA: II

14.5 Environmental hazards
ADR/RID: yes        IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user
No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H301       Toxic if swallowed.
H301 + H311 + Toxic if swallowed, in contact with skin or if inhaled
H331
H311       Toxic in contact with skin.
H314       Causes severe skin burns and eye damage.
H315       Causes skin irritation.
H319       Causes serious eye irritation.
H331       Toxic if inhaled.
H341       Suspected of causing genetic defects.
H373       May cause damage to organs through prolonged or repeated exposure.
H411       Toxic to aquatic life with long lasting effects.

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. Central Drug House (P) Ltd and its
Affiliates shall not be held liable for any damage resulting from handling or from contact with the
above product. See www.cdhhfinechemical.com for additional terms and conditions of sale.