



**2,4-DICHLOROPHENOL**  
**CAS No 120-83-2**

**MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS**

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

**1.1 Product identifiers**

Product name : 2,4-Dichlorophenol

CAS-No. : 120-83-2

**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  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto: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 4), H302

Acute toxicity, Oral (Category 2), H300

Acute toxicity, Dermal (Category 3), H311

Skin corrosion (Category 1B), H314

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)

H300

Fatal if swallowed.

H302

Harmful if swallowed.

|                                |  |
|--------------------------------|--|
| H311                           | Toxic in contact with skin.  |
| H314                           | Causes severe skin burns and eye damage.   |
| H411                           | Toxic to aquatic life with long lasting effects.   |
| Precautionary statement(s)     |  |
| P264                           | Wash hands thoroughly after handling.  |
| P273                           | Avoid release to the environment.  |
| P280                           | Wear protective gloves/ protective clothing/ eye protection/ face protection.  |
| P301 + P310                    | IF SWALLOWED: Immediately call a POISON CENTER/doctor.   |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310                           | Immediately call a POISON CENTER/doctor.   |
| Supplemental Hazard Statements | none   |

### 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.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                  |   |
|------------------|---|
| Formula          | : C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub> O |
| Molecular weight | : 163.00 g/mol                                    |
| CAS-No.          | : 120-83-2  |
| EC-No.           | : 204-429-6                                       |
| Index-No.        | : 604-011-00-7                                    |

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component                 |              | Classification                                  | Concentration |
|---------------------------|--------------|---|---------------|
| <b>2,4-Dichlorophenol</b> |              |   |               |
| CAS-No.                   | 120-83-2     | Acute Tox. 4; Acute Tox. 2;                     | <= 100 %      |
| EC-No.                    | 204-429-6    | Acute Tox. 3; Skin Corr. 1B;                    |               |
| Index-No.                 | 604-011-00-7 | Aquatic Chronic 2; H302, H300, H311, H314, H411 |               |

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, Hydrogen chloride gas

#### **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.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

#### **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**

#### **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 (EN 143) respirator cartridges as a backup to engineering controls. If the 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**

|   |   |
|---|---|
| a) Appearance                                   | Form: crystalline/lumps<br>Colour: white to off white |
| b) Odour  | No data available                                     |
| c) Odour Threshold                              | No data available                                     |
| d) pH   | No data available                                     |
| e) Melting point/freezing point                 | Melting point/range: 40 - 43 °C - lit.                |
| f) Initial boiling point and boiling range      | 209 - 210 °C - lit.                                   |
| g) Flash point                                  | 114.0 °C - closed cup                                 |
| h) Evaporation rate                             | No data available                                     |
| i) Flammability (solid, gas)                    | No data available                                     |
| j) Upper/lower flammability or explosive limits | No data available                                     |
| k) Vapour pressure                              | 0.1 mmHg at 25.0 °C                                   |
| l) Vapour density                               | No data available                                     |
| m) Relative density                             | 1.38 g/cm <sup>3</sup> at 60.00 °C                    |
| n) Water solubility                             | No data available                                     |
| o) Partition coefficient: n-octanol/water       | log Pow: 3.06 log Pow: 5                              |
| p) Auto-ignition temperature                    | No data available                                     |
| 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

No data available

## 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

Oxidizing agents, acids, Acid chlorides, Acid anhydrides, Metals

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

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 - 47.0 mg/kg(2,4-Dichlorophenol)

Remarks: Behavioral:Food intake (animal). Lungs, Thorax, or Respiration:Dyspnea. Gastrointestinal:Other changes.

LD50 Dermal - Mammal - 790.0 mg/kg(2,4-Dichlorophenol)

#### Skin corrosion/irritation

Skin - Rabbit(2,4-Dichlorophenol)

Result: Severe skin irritation - 24 h

(Draize Test)

#### Serious eye damage/eye irritation

No data available(2,4-Dichlorophenol)

#### Respiratory or skin sensitisation

No data available(2,4-Dichlorophenol)

#### Germ cell mutagenicity

No data available(2,4-Dichlorophenol)

#### Carcinogenicity

IARC: 2B - Group 2B: Possibly carcinogenic to humans (2,4-Dichlorophenol)

#### Reproductive toxicity

No data available(2,4-Dichlorophenol)

#### Specific target organ toxicity - single exposure

No data available(2,4-Dichlorophenol)

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available(2,4-Dichlorophenol)

#### Additional Information

RTECS: SK8575000

spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Weakness, Lowered blood pressure, Tremors, Dizziness, Confusion., Convulsions, Cyanosis, Shock., Unconsciousness, Symptoms may be delayed., Molten or hot 2,4-Dichlorophenol is immediately absorbed through the skin death in humans has been caused by skin exposure without immediate decontamination as little as 1% body surface area (hand-size) may cause death.(2,4-Dichlorophenol)

Blood - (2,4-Dichlorophenol)

## SECTION 12: Ecological information

### 12.1 Toxicity

|   |  |
|---|--|
| Toxicity to fish                                    | LC50 - <i>Lepomis macrochirus</i> (Bluegill) - 1.6 - 2.6 mg/l - 96.0 h(2,4-Dichlorophenol)                   |
|   | LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 2.2 - 3.1 mg/l - 96.0 h(2,4-Dichlorophenol)              |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - <i>Daphnia magna</i> (Water flea) - 2.70 - 3.90 mg/l - 24 h(2,4-Dichlorophenol)                       |
| Toxicity to algae                                   | EC50 - <i>Chlorella vulgaris</i> (Fresh water algae) - 9.20 mg/l - 96 h(2,4-Dichlorophenol)                  |
|   | Growth inhibition EC50 - <i>Chlorella vulgaris</i> (Fresh water algae) - 9.2 mg/l - 96 h(2,4-Dichlorophenol) |

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

Bioaccumulation *Carassius auratus* (goldfish) - 24 h - 8 mg/l(2,4-Dichlorophenol)

Bioconcentration factor (BCF): 34

### 12.4 Mobility in soil

No data available(2,4-Dichlorophenol)

### 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.

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 2928

IMDG: 2928

IATA: 2928

### 14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (2,4-Dichlorophenol)

IMDG: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (2,4-Dichlorophenol)

IATA: Toxic solid, corrosive, organic, n.o.s. (2,4-Dichlorophenol)

### 14.3 Transport hazard class(es)

ADR/RID: 6.1 (8)

IMDG: 6.1 (8)

IATA: 6.1 (8)

### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

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.

H300 Fatal if swallowed. H302

Harmful if swallowed. H311

Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

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.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.