

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 : Bio-Chem Chemicals
5455 Nicholson Road, Science Market
Ambala Cantt, 133001 - Haryana
+91 82952 41953
info@biofinechemical.com - www.biofinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 99921 51495 (10.00am - 06.30pm) (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 ₆ H ₄ Cl ₂ 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
2,4-Dichlorophenol			
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 is used, 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 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 ³ at 60.00 °C
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	log Pow: 3.06log 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.