

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

Identification of the Product

- **Product Name:** Copper Sulphate Pentahydrate
- **Chemical Name:** Copper(II) Sulphate Pentahydrate
- **EC No.:** 231-847-6
- **CAS No.:** 7758-99-8
- **Molecular Formula:** $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
- **Molecular Weight:** 249.68 g/mol

Use of the Product/Preparation

- Laboratory chemicals
- Manufacture of substances
- Water treatment
- Agriculture, feed & industrial applications

Details of the supplier of the safety data sheet

PHINE KEMIKALS INDIA
Plot No. 1/2/3/90/P3A, G.I.D.C. Industrial Estate, Godhra, Gujarat 389002
INDIA
T +919824063593
info@phinekem.in, www.phinekem.in

Emergency telephone number

Emergency number : + 919023930031 (24 hrs)

SECTION 2: Hazards identification

Classification of the substance or mixture

According to GHS / CLP:

- Acute Toxicity (Oral) – Category 4
- Skin Irritation – Category 2
- Eye Irritation – Category 2
- Hazardous to the Aquatic Environment – Acute Category 1

Hazard Statements

- Harmful if swallowed
- Causes skin irritation
- Causes serious eye irritation
- Very toxic to aquatic life

Label Elements

- **Signal Word:** Warning
- **Pictograms:** Exclamation Mark, Environment

SECTION 3: Composition/information on ingredients

Substances

Name : MAGNESIUM SULPHATE HEPTAHYDRATE
CAS-No. : 7758-99-8
EC-No. : 231-847-6

Mixtures

Not applicable

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Move affected person to fresh air. Keep at rest. If symptoms persist, seek medical attention.

Skin Contact: Wash immediately with plenty of water and soap. Remove contaminated clothing. Seek medical attention if irritation persists.

Eye Contact: Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present. Seek medical advice.

Ingestion: Rinse mouth with water. **Do not induce vomiting.** Seek immediate medical attention or contact a poison centre.

SECTION 5: Firefighting measures

Suitable extinguishing media:

Water spray. Dry Powder. Foam.

Special Hazard arising from the substance or mixture:

Toxic fumes of copper oxides and sulphur oxides may be released during fire.

Protection during firefighting:

- Self contained breathing apparatus.
- Full protective clothing

SECTION 6: Accidental release measures

- Evacuate unnecessary personnel
- Ensure adequate ventilation
- Avoid dust formation
- Wear suitable protective equipment

Environmental Precautions:

Avoid release into drains, soil, or water bodies.

Cleanup Methods:

Mechanically collect using scoop or vacuum. Dispose at an authorized waste facility.

SECTION 7: Handling and storage

Precautions for Safe Handling

- Ensure good ventilation
- Avoid contact with skin and eyes
- Do not inhale dust

- Wear appropriate PPE

Storage Conditions

- Store in original, tightly closed container
- Store in cool, dry, well-ventilated area
- Protect from moisture

SECTION 8: Exposure controls/personal protection

Engineering Controls

- Adequate ventilation at workplace

Personal Protective Equipment

- **Eye Protection:** Chemical safety goggles
- **Skin Protection:** Protective gloves
- **Respiratory Protection:** Dust mask / respirator if dust is generated

Environmental Exposure Controls

- Avoid environmental release

SECTION 9: Physical and chemical properties

- **Physical State:** Solid
- **Appearance:** Blue crystalline powder or crystals
- **Odour:** Odourless
- **pH (5% solution):** 3.5 – 4.5
- **Density:** ~2.28 g/cm³
- **Melting Point:** Decomposes at ~110°C
- **Solubility:** Soluble in water
- **Flammability:** Non-flammable

SECTION 10: Stability and reactivity

- Stable under normal conditions
- Avoid heat, moisture, and incompatible materials
- **Incompatible Materials:** Strong reducing agents, strong bases
- **Hazardous Decomposition Products:** Copper oxides, sulphur oxides

SECTION 11: Toxicological information

- **Acute Oral Toxicity:** Harmful if swallowed
- **Skin Irritation:** Causes irritation
- **Eye Irritation:** Causes serious irritation
- **Sensitization:** Not classified
- **Carcinogenicity:** Not classified
- **Reproductive Toxicity:** Not classified

SECTION 12: Ecological information

- Very toxic to aquatic organisms

- May cause long-term adverse effects in aquatic environment
- Avoid environmental contamination

SECTION 13: Disposal considerations

Dispose of contents/container in accordance with local, regional, and national regulations through authorized waste handlers.

SECTION 14: Transport information

- Not classified as dangerous goods for transport
- Avoid environmental release during transport

SECTION 15: Regulatory information

Labeling according to EC Directives:

Symbol: --

R-phrases: --

S-phrases: --

SECTION 16: Other information

Regional representation:

India: given in Chapter 1 (company identification)

Disclaimer:

This Safety Data Sheet (SDS) information is based on our current knowledge and is intended to describe the product for health, safety, and environmental purposes only. It should not be interpreted as a guarantee of any specific product property.