

Material Safety Data Sheet (MSDS)

Product Name: Copper Sulphate Stone

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

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1. Product Identification

- **Chemical Name:** Copper Sulphate
- **Synonyms:** Blue vitriol, Cupric sulfate
- **CAS Number:** 7758-99-8
- **Molecular Formula:** $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ (pentahydrate)

2. Composition / Information on Ingredients

- **Copper Sulfate Pentahydrate:** $\geq 99\%$
- **Impurities:** Trace amounts of iron, arsenic, or other metals

3. Hazard Identification

- Harmful if swallowed.

- Causes severe eye irritation.
- May cause skin irritation on prolonged exposure.
- Toxic to aquatic life.

4. First Aid Measures

- **Inhalation:** Move to fresh air; seek medical attention if symptoms persist.
- **Skin Contact:** Wash immediately with plenty of water; remove contaminated clothing.
- **Eye Contact:** Rinse immediately with water for at least 15 minutes; consult an eye specialist.
- **Ingestion:** Do NOT induce vomiting; rinse mouth and seek medical attention immediately.

5. Fire Fighting Measures

- **Suitable Extinguishing Media:** Water spray, dry chemical, CO₂, foam.
- **Special Hazards:** Emits toxic fumes (sulfur oxides, copper oxides) when heated.
- **Protective Equipment:** Wear self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

- Avoid dust formation.
- Sweep up carefully and place in suitable containers for disposal.
- Prevent entry into water bodies.

7. Handling and Storage

- **Handling:** Avoid inhalation and contact with skin/eyes. Use protective equipment.
- **Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances like strong acids and bases.

8. Exposure Controls / Personal Protection

- **Engineering Controls:** Adequate ventilation.
- **Respiratory Protection:** Dust mask or respirator if dust exposure is high.
- **Hand Protection:** Protective gloves.
- **Eye Protection:** Safety goggles.
- **Skin Protection:** Protective clothing.

9. Physical and Chemical Properties

- **Appearance:** Blue crystalline solid
- **Odor:** Odorless
- **Melting Point:** 110°C (decomposes)
- **Solubility:** Soluble in water, slightly soluble in alcohol
- **pH:** 4–5 (aqueous solution)

10. Stability and Reactivity

- **Stability:** Stable under normal conditions.
- **Reactivity:** Reacts with strong acids and strong reducing agents.
- **Hazardous Decomposition Products:** Sulfur oxides, copper oxides.

11. Toxicological Information

- **Acute Toxicity:** Harmful if ingested.
- **Chronic Effects:** May cause liver and kidney damage on prolonged exposure.
- **Routes of Exposure:** Inhalation, ingestion, skin and eye contact.

12. Ecological Information

- **Aquatic Toxicity:** Highly toxic to fish and aquatic organisms.
- **Persistence and Degradability:** Non-biodegradable, remains in soil and water.

13. Disposal Considerations

- Dispose of in accordance with local regulations.
- Do not discharge into water sources or sewer systems.

14. Transport Information (Detailed)

- **UN Number:** 3077
- **Proper Shipping Name:** Environmentally hazardous substance, solid, n.o.s. (Copper sulfate)
- **Transport Class:** 9 – Miscellaneous dangerous substances and articles
- **Packing Group:** III (low danger)
- **Labeling:**
 - **Hazard Label:** Environmental hazard, harmful
 - **Handling Instructions:** Keep dry, avoid contact with incompatible materials
- **Transport Precautions:**
 - Avoid rough handling to prevent container rupture.
 - Use sealed containers to prevent spillage and dust dispersion.
 - Ensure adequate ventilation in the transport vehicle.
- **Special Considerations:**
 - During transport, avoid contamination of food or feed materials.
 - Follow regional regulations for hazardous waste transport if shipping in bulk.

15. Regulatory Information

- Complies with national chemical safety regulations.
- Listed under hazardous substances regulations for labeling and handling.

16. Other Information

- **Disclaimer:** The information provided is based on current knowledge and is intended to describe the product for safety purposes. It should not be considered a guarantee of specific properties.
- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.