

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 285.00

Revision Date: September 20, 2004

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### Section 1 — Chemical Product and Company Identification

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#### Copper(II) Sulfate

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

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### Section 2 — Composition, Information on Ingredients

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Copper(II) sulfate, pentahydrate

Synonym: Cupric sulfate, blue vitriol, chalcantite

CAS#: 7758-99-8

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### Section 3 — Hazards Identification

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Blue crystalline powder, granules or larger crystals. Odorless.  
Skin and respiratory irritant; moderately toxic by ingestion and inhalation.

#### FLINN AT-A-GLANCE

Health-2  
Flammability-0  
Reactivity-0  
Exposure-2  
Storage-1

0 is low hazard, 3 is high hazard

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### Section 4 — First Aid Measures

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Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

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### Section 5 — Fire Fighting Measures

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Non flammable, non combustible solid.

However, sulfur trioxide can be produced at temperatures above 653 C.

**Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None  
Established

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### Section 6 — Accidental Release Measures

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Restrict unprotected personnel from area. Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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### Section 7 — Handling and Storage

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Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates and phosphates. Efflorescent. Protect from air, store in a Flinn Chem-Saf bag. Use and dispense in a hood.

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### Section 8 — Exposure Controls, Personal Protection

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Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

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### Section 9 — Physical and Chemical Properties

Blue crystalline powder, granules or larger crystals. Odorless.  
Solubility: Soluble in water and methanol; slightly in alcohol.  
Formula:  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$   
Formula Weight: 249.69

Specific Gravity: 2.28

### Section 10 — Stability and Reactivity

Avoid contact with finely powdered metals, heat. Will corrode steel.  
Shelf Life: Fair, slowly effloresces in air.

### Section 11 — Toxicological Information

Acute effects: Toxic, severe eye irritant, gastrointestinal disturbances  
Chronic effects: Possible mutagen  
Target organs: Liver, kidneys, blood

ORL-RAT LD50: 300 mg/Kg  
IHL-RAT LC50: N.A.  
SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

### Section 12 — Ecological Information

Data not yet available.

### Section 13 — Disposal Considerations

Please consult with state and local regulations.  
Flinn Suggested Disposal Method #26a is one option.

### Section 14 — Transport Information

Shipping Name: Not regulated  
Hazard Class: N/A  
UN Number: N/A

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (231-847-6).

### Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

**FLINN SCIENTIFIC INC.**

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*Flinn Chemical Packaging Prevents Accidents*

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