

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 285.00

Revision Date: June 25, 2010

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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, chalcantinite

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 and 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 at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, and 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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Nonflammable, noncombustible solid.

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

**Fire Fighting Instructions:** Use a 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 the area. Sweep up the spill, place in a 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 a chemical-resistant apron.

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Blue, crystalline powder, granules or larger crystals. Odorless. Specific Gravity: 2.28  
Solubility: Soluble in water and methanol; slightly in alcohol.  
Formula:  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$   
Formula Weight: 249.69

**SECTION 10 — STABILITY AND REACTIVITY**

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

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Toxic, severe eye irritant, and gastrointestinal disturbances. ORL-RAT  $\text{LD}_{50}$ : 300 mg/Kg  
Chronic effects: Possible mutagen. IHL-RAT  $\text{LC}_{50}$ : N.A.  
Target organs: Liver, kidneys, and blood. SKN-RBT  $\text{LD}_{50}$ : 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**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**