

FLINN SCIENTIFIC, INC.
Material Safety Data Sheet (MSDS)

MSDS #: 285.00

Revision Date: June 25, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Copper(II) Sulfate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Copper(II) sulfate, pentahydrate

Synonym: cupric sulfate, blue vitriol, chalcantite

CAS#: 7758-99-8

SECTION 3 — HAZARDS IDENTIFICATION

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

SECTION 4 — FIRST AID MEASURES

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.

SECTION 5 — FIRE FIGHTING MEASURES

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

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 7 — HANDLING AND STORAGE

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.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

Appearance: 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 LD_{50} : 300 mg/Kg
Chronic effects: Possible mutagen. IHL-RAT LC_{50} : N.A.
Target organs: Liver, kidneys, and blood. SKN-RBT 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.**