

Copper(II) Sulfate Pentahydrate Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Copper(II) Sulfate Pentahydrate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261
Chemtrec Emergency Phone Number: (800) 424-9682

Signal Word
DANGER

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 3). Toxic if swallowed (H301). Do not eat, drink or smoke when using this product (P270).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Pictograms



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Copper(II) sulfate, pentahydrate	7758-99-8	CuSO ₄ •5H ₂ O	249.69	
Synonyms: Cupric sulfate; Blue vitriol; Chalcantite				

SECTION 4 — FIRST AID MEASURES

If exposed or concerned: Get medical advice or attention (P308+P313)

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

If on skin: Rinse cautiously with water for several minutes (P351).

If swallowed: Rinse mouth. Immediately call a POISON CENTER or physician (P301+P330+P310).

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

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

In case of fire: Use a tri-class dry chemical fire extinguisher.

NFPA Code

H: 2

F: 0

R: 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Blue, crystalline powder, granules or larger crystals. Odorless.

Specific gravity: 2.28

Soluble: Water and methyl alcohol. Slightly in alcohol.

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with finely powdered metals and heat. Will corrode steel.

Shelf life: Fair, slowly effloresces in air. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, severe eye irritant, and gastrointestinal disturbances.

ORL-RAT LD₅₀: 300 mg/kg

Chronic effects: Possible mutagen.

IHL-RAT LC₅₀: N.A.

Target organs: Liver, kidneys, and blood.

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Environmentally Hazardous substances, solid, n.o.s. (copper sulphate pentahydrate). Hazard class: 9. UN number: 3077. Packing group III.

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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

N/A = Not applicable

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