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

**MSDS #:** 286.00

**Revision Date:** December 14, 2011

#### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Copper(II) Sulfate Solution

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 (7758-99-8) 2.5-25% and Water (7732-18-5) 97.5-75%

Synonym: cupric sulfate CAS#: None established

#### **SECTION 3 — HAZARDS IDENTIFICATION**

Blue aqueous solution. Odorless.

Mildly toxic by ingestion. Irritant to skin, eyes, and mucous membranes. Avoid contact with body

tissues.

FLINN AT-A-GLANCE

Health-1 Flammability-0 Reactivity-0

Exposure-1 Storage-0

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 or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

#### **SECTION 5 — FIRE FIGHTING MEASURES**

Nonflammable, noncombustible solution.

NFPA CODE

None established

#### **SECTION 6 — ACCIDENTAL RELEASE MEASURES**

Restrict unprotected personnel from the area and ventilate area. Contain the spill with sand or absorbent material and deposit in a sealed bag or container. 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, sulfates, thiosulfates, and phosphates.

#### 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.

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#### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Blue solution. Odorless.

pH: ~4

A mixture of water and copper(II) sulfate.

Saturation: 1 molar, 24% CuSO<sub>4</sub>; 0.1 molar, 2.5% CuSO<sub>4</sub>; 0.01

molar, 0.25% CuSO<sub>4</sub>

#### **SECTION 10 — STABILITY AND REACTIVITY**

Shelf life: Indefinite, if stored properly.

#### <u>SECTION 11 — TOXICOLOGICAL INFORMATION</u>

Acute effects: N.A. ORL-RAT LD<sub>50</sub>: 300 mg/kg as CuSO<sub>4</sub>.

Chronic effects: N.A. IHL-RAT  $LC_{50}$ : N.A. Target organs: N.A. 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 review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #26b 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**

Not listed.

#### **SECTION 16 — OTHER INFORMATION**

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