

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 287.00

Revision Date: June 25, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Copper(II) Sulfate Electrolyte 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) 20%, sulfuric acid (7664-93-9) 6%, and water (7732-18-5) 74%

CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Blue solution. Odorless.

Corrosive to skin, eyes, and mucous membranes. Moderately toxic by ingestion. Avoid contact with body tissues.

FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-1

Exposure-2

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: 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 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, sulfites, 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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Blue solution. Odorless.

Contains sulfuric acid, copper(II) sulfate, and water.

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with alkali materials.

Shelf life: Good.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: 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 #24b 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.**

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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 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: 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 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, sulfites, 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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Blue solution. Odorless.

A mixture of water and copper(II) sulfate.

Saturations: 1 molar, 24% CuSO₄; 0.1 molar, 2.5% CuSO₄; 0.01 molar, 0.25% CuSO₄

SECTION 10 — STABILITY AND REACTIVITY

Shelf Life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD₅₀: 300 mg/kg as CuSO₄.

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 #26b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Not regulated

Hazard Class: N/A

UN Number: N/A

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SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

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CAS#: None established

SECTION 3 — HAZARDS IDENTIFICATION

Blue solution. Odorless.

Corrosive to skin, eyes, and mucous membranes. Moderately toxic by ingestion. Avoid contact with body tissues.

FLINN AT-A-GLANCE

Health-2

Flammability-0

Reactivity-1

Exposure-2

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.

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

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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, sulfites, 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.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Blue solution. Odorless.

Contains sulfuric acid, copper(II) sulfate, and water.

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with alkali materials.

Shelf life: Good.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Toxic, corrosive

ORL-RAT LD₅₀: N.A.

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: 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 #24b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Not regulated

Hazard Class: N/A

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