Mallinckrodt Material Safety Data

Mallinckrodt provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Mallinckrodt makes no representations, or warranties, either express or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Mallinckrodt will not be responsible for damages resulting from use of or reliance upon this information.

Performance and Laboratory Chemical Div., P.O. Box 800, Paris, KY 40362.

Emergency Phone Number: 314-539-1600

CUPRIC ACETATE

PRODUCT IDENTIFICATION:

Synonyms: Cupric acetate monohydrate; acetic acid, copper

(2+) salt, monohydrate

Formula CAS No.: 6046-93-1 (Hydrate)

TSCA CAS No.: 142-71-2 (Anhydrous)

Molecular Weight: 199.65

Chemical Formula: Cu(C₂H₃O₂)₂ H₂O

Hazardous Ingredients: Cupric acetate

PRECAUTIONARY MEASURES

DANGER! CAUSES EYE BURNS. HARMFUL IF SWALLOWED OR INHALED. CHRONIC EXPOSURE MAY CAUSE TISSUE DAMAGE.

Do not get in eyes. Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

EMERGENCY/FIRST AID

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In all cases call a physician. SEE SECTION 5.

DOT Hazard Class: ORM-E

SECTION 1 Physical Data

Appearance: Dark green powder.

Odor: Slight acetic acid odor.

Solubility: 7.2g/ml cold water.

Boiling Point: Decomposes @ 240°C (464°F).

Melting Point: 115°C (239°F).

Density: 1.88

Vapor Density (Air=1): No information found. Vapor Pressure (mm Hg): No information found.

Evaporation Rate: No information found.

SECTION 2 Fire and Explosion Information

Fire:

Not considered to be a fire hazard. May form combustible fumes upon decomposition which may increase the flammability of a fire.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 3 Reactivity Data

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Emits acrid smoke, irritating and combustible fume when heated to decomposition.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Acetylene, hydrazine, and nitromethane.

SECTION 4 Leak/Spill Disposal Information

Ventilate area of leak or spill. Clean-up personnel require protective clothing and respiratory protection from dust.

Spills: Pick up and place in a suitable container for reclamation or disposal in a method that does not generate dust

Disposal: Whatever cannot be saved for reclamation may be disposed in a RCRA approved hazardous waste facility.

Reportable Quantity (RQ)(CWA/CERCLA): 100 lbs.

Ensure compliance with local, state and federal regulations.

CUPRIC ACETATE

Effective Date: 04-06-89 Supersedes 08-28-85

Mallinckrodt Material Safety Data

Mallinckrodt provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Mallinckrodt makes no representations, or warranties, either express or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Mallinckrodt will not be responsible for damages resulting from use of or reliance upon this information.

Performance and Laboratory Chemical Div., P.O. Box 800, Paris, KY 40362.

Emergency Phone Number: 314-539-1600

SECTION 5 Health Hazard Information

A. EXPOSURE / HEALTH EFFECTS

Inhalation:

May cause irritation to the respiratory tract, coughing, sore throat, shortness of breath, sneezing, digestive disorders, and fever.

Ingestion:

May cause burning pain in the mouth, esophagus, and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, metallic taste, and diarrhea may occur. If vomiting does not occur immediately, systemic poisoning may occur. Symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure.

Skin Contact:

May cause irritation, redness, and pain.

Eve Contact:

Corrosive. May cause irritation, redness, pain, blurred vision, discoloration, and damage.

Chronic Exposure:

Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure to dusts of copper salts may cause discoloration of the skin or hair, ulceration and perforation of the nasal septum, runny nose, metallic taste, and atrophic changes and irritation of the mucous membranes.

Aggrevation of Pre-existing Conditions:

Persons with pre-existing skin disorders or impaired liver, kidney, or pulmonary function or pre-existing Wilson's disease may be more susceptible to the effects of this material.

B. FIRST AID

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Never give anything by mouth to an unconscious person.

Skin Exposure:

Remove any contaminated clothing. Wipe off excess from skin. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists

Eye Exposure:

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

C. TOXICITY DATA (RTECS, 1986)

Oral rat LD50: 710 mg/kg.

SECTION 6 Occupational Control Measures

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL): 1 mg/m³ (TWA) for copper dusts & mists as Cu

-ACGIH Threshold Limit Value (TLV):

1 mg/m³ (TWA) for copper dusts & mists as Cu

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators: (NIOSH Approved)

If the TLV is exceeded, a dust/mist respirator with chemical goggles may be worn, in general, up to ten times the TLV. Consult respirator supplier for limitations. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eve Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 7 Storage and Special Information

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances.

CUPAC

Mallinckrodt Material Safety Data

Mallinckrodt provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Mallinckrodt makes no representations, or warranties, either express or implied, of merchantability, fitness for a particular purpose with respect to the information set forth herein or to the product to which the information refers. Accordingly, Mallinckrodt will not be responsible for damages resulting from use of or reliance upon this information.

Performance and Laboratory Chemical Div., P.O. Box 800, Paris, KY 40362.

Emergency Phone Number: 314-539-1600

Addendum to Material Safety Data Sheet REGULATORY STATUS

This Addendum Must Not Be
Detached from the MSDS

Identifies SARA 313 substance(s)

Any copying or redistribution of the MSDS

must include a copy of this addendum

(Chem.Key: CUPAC)

Product or Components of Product:

CUPRIC ACETATE (142-71-2)

Hazard Categories for SARA
Section 311/312 Reporting
Acute Chronic Fire Pressure Reactive
----X X

SARA EHS Sect. 302		SARA Section 313 Chemicals		CERCLA Sec.103	RCRA
RQ (lbs.)	TPQ (lbs.)	Name List	Chemical Category	RQ (lbs.)	Sec. 261.33
	\$40, \$44, and and any part for the \$40 per part part		and their state state state state state state and state		
No	No	No	Copper compound	100	No

SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.

SARA Section 302 EHS TPQ: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS. SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.

<u>CERCLA Sec. 103</u>: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802); Listed at 40 CFR 302.4 RCRA: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33

CUPRIC ACETATE

Effective Date: 04-06-89 Supersedes 08-28-85