Material Safety Data Sheet
Copper (II) Acetate Monohydrate
MSDS\# 05605

MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:
For information in the US, call:
Emergency Number US:
CHEMTREC Phone Number, US:
Section 2 - Composition, Information on Ingredients

Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Caution! May be harmful if swallowed. May cause liver damage. May cause eye, skin, and respiratory tract irritation. Target Organs: Liver.

## Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion:
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. May be harmful if swallowed.
Inhalation: May cause respiratory tract irritation.
Chronic: Chronic exposure may cause liver damage. Individuals with Wilson's disease are unable to metabolize copper. Thus, copper accumulates in various tissues and may result in liver, kidney, and brain damage.

## Section 4 - First Aid Measures

Eyes: $\quad$ Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: $\quad$ Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.
Ingestion:
Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to
Physician:
Antidote: The use of d-Penicillamine as a chelating agent should be determined by qualified medical personnel.

## Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or Media: appropriate foam.
Autoignition Not applicable.
Temperature:
Flash Point: Not applicable.
Explosion Limits:
Not available
Lower:
Explosion Limits: ${ }^{\text {Not available }}$
Upper:
NFPA Rating: health: 1 ; flammability: 0 ; instability: 0 ;

## Section 6 - Accidental Release Measures

General
Information:
Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, ventilation.

Section 7 - Handling and Storage
Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.
Section 8 - Exposure Controls, Personal Protection

| Chemical Name | ACGIH | NIOSH | \|OSHA - Final |
| :---: | :---: | :---: | :---: |
| Copper (II) Acetate\|none listed |  | $11 \mathrm{mg} / \mathrm{m} 3$ TWA (dust | \|none listed |
| Monohydrate |  | land mist, as Cu, | \\| |
|  |  | \| except copper | I |
|  |  | \| fume) (listed | I |
|  |  | I under Copper | \| |
|  |  | \| compounds, | I |
|  |  | \|n.o.s.). $100 \mathrm{mg} / \mathrm{m} 3$ | I |
|  |  | \| IDLH (dust and | I |
|  |  | \| mist, as Cu) | I |
|  |  | \| (listed under | \| |
|  |  | \| Copper | I |
|  |  | \| compounds, | I |
|  |  | ( n.o.s.). | \| |

OSHA Vacated PELs: Copper (II) Acetate Monohydrate: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

## Exposure Limits

## Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: $\begin{aligned} & \text { A respiratory protection program that meets OSHA's } 29 \text { CFR } 1910.134 \text { and ANSI Z88.2 requirements or } \\ & \text { European Standard EN } 149 \text { must be followed whenever workplace conditions warrant respirator use. }\end{aligned}$
Section 9 - Physical and Chemical Properties
Physical State: Solid
Color: dark green
Odor: none reported
pH : Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 240 deg $\mathrm{C}\left(464.00^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: $115 \mathrm{deg} \mathrm{C}\left(239.00^{\circ} \mathrm{F}\right)$
Decomposition Temperature:
Solubility in water: $7.2 \%$ in cold water.
Specific Gravity/Density: 1.88
Molecular Formula: $\mathrm{Cu}(\mathrm{C} 2 \mathrm{H} 3 \mathrm{O} 2) 2 . \mathrm{H} 2 \mathrm{O}$
Molecular Weight: 199.599
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials

Hazardous Decomposition Products
Hazardous Polymerization

Stable at room temperature in closed containers under normal storage and handling conditions.
Incompatible materials, dust generation, excess heat, strong oxidants.

## Not available

Strong oxidants, oxides of copper.
Has not been reported.
Section 11-Toxicological Information

RTECS\#: CAS\# 6046-93-1: AG3500000
RTECS:
LD50/LC50: $\quad$ CAS\# 6046-93-1: Oral, rat: LD50 $=710 \mathrm{mg} / \mathrm{kg}$;

Carcinogenicity: Copper (II) Acetate Monohydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: $\quad$ See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Not available
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information

## US DOT

Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

European/International Regulations

## European Labeling in Accordance with EC Directives

Hazard Symbols: XN
Risk Phrases:
R 22 Harmful if swallowed.
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.
S 28A After contact with skin, wash immediately with plenty of water.
S 37 Wear suitable gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)
CAS\# 6046-93-1: Not available
Canada
Canadian WHMIS Classifications: D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 6046-93-1 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 6046-93-1 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR720.3(u)(2)).

Section 16 - Other Information
MSDS Creation Date: 5/12/1998
Revision \#7 Date 7/20/2009


The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

