



Safety Data Sheet
According to 29 CFR 1910.1200 (OSHA HCS)

SDS No. 211

Review date October 21, 2016

1 Identification of substance and company

Product details

Product name: Copper (II) acetate, monohydrate
Product code: 15965, 90527
Relevant identified uses of the substance: Research and product development
Manufacturer/Supplier: Noah Technologies Corporation
1 Noah Park
San Antonio, Texas 78249-3419
Phone: (210) 691-2000
Web site: www.noahtech.com
Emergency information: CHEMTREC
800-424-9300

2 Hazards identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, oral - 4
Skin irritation - 2
Eye irritation - 2
Specific target organ toxicity - single exposure - 3, respiratory system



Pictogram: Exclamation mark
Signal Word: Warning
Hazard statements: H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when using this product

Precautionary statements:

P280 Wear protective gloves / protective clothing / eye protection / face protection
P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+352 IF ON SKIN: Wash with plenty of soap and water
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell
P332+313 If skin irritation occurs: Get medical advice/attention
P337+313 If eye irritation persists: Get medical; advice/attention
P362 Take off contaminated clothing and wash before reuse
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) or not covered by GHS:

None
Health 2
Flammability 0
Physical hazard 0

3 Composition/Information on ingredients

Chemical name: Copper (II) acetate, monohydrate
Designation: (CAS#): 6046-93-1
EC Number: 205-553-3
Formula: $Cu(C_2H_3O_2)_2 \cdot H_2O$
Synonyms: Cupric acetate, copper diacetate, neutral verdigris

4 First aid measures

After inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical advice

After skin contact:	Instantly wash with water and soap and rinse thoroughly Seek immediate medical advice
After eye contact:	Rinse opened eye for at least 15 minutes under running water. Assure adequate flushing by separating the eyelids with fingers. Seek immediate medical advice
After swallowing:	If conscious, rinse mouth out with water. Dilute with large quantities of fluid.
Most important symptoms and effects, both acute and delayed:	Ingestion of copper salts may result in irritation of gastrointestinal tract, nausea, vomiting, salivation, gastric pain, hemorrhagic gastritis, diarrhea, capillary damage, liver and kidney damage, and central nervous system stimulation followed by depression. Jaundice, pain in the liver, and hemolytic anemia have been reported following acute human poisonings.
Indication of any immediate medical attention and special treatment needed:	None known

5 Fire-fighting measures

Suitable extinguishing agents:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Special hazards caused by the material, its products of combustion or resulting gases:	In case of fire, the following can be released: Oxides of copper, carbon dioxide and monoxide
Protective equipment:	Wear self-contained breathing apparatus Wear fully protective fire fighting equipment/clothing in fire situations

6 Accidental release measures

Person-related safety precautions:	Wear personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Measures for environmental protection:	Do not allow material to be released to the environment without proper governmental permits
Measures for cleaning/collecting:	Dispose of contaminated material as waste according to item 13 Ventilate and wash spill site after material removal is complete
Additional information:	See Section 7 for information on safe handling See Section 8 for information on personal protective equipment See Section 13 for information on disposal

7 Handling and storage

Information for safe handling:	Best to store and handle under dry protective gas if possible Keep containers tightly sealed Store in cool, dry place in tightly closed containers Ensure good ventilation/exhaust at the workplace
Information about protection against explosions and fires:	This material is not flammable
Information about storage in one common storage facility:	Store away from air / water / moisture Do not store together with strong acids Store away from oxidizing agents
Further information about storage conditions:	Best to store under dry, inert gas Keep container tightly sealed Store in cool, dry conditions in well sealed containers

8 Exposure controls/personal protection

Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute
Components with critical values that require monitoring at the workplace:	ACGIH TLV: TWA 1 mg(Cu)/m ³ OSHA PEL: TWA 0.1 mg(Cu)/m ³
Additional information:	No data
Personal protective equipment	
General protective and hygienic measures:	The usual precautionary measures should be adhered to in handling the chemicals Keep away from foodstuffs, beverages and food Instantly remove any soiled and impregnated garments Wash hands during breaks and at the end of the work Avoid contact with the eyes and skin
Respiratory protection:	Use suitable respirator when high concentrations are present Use only NIOSH/MESA or CEN approved full-face particle respirator type N100 or TYPE P3 (EN 143)
Hand protection:	Impervious gloves
Eye protection:	Safety glasses Chemical safety goggles
Skin protection:	Protective work clothing
Additional protective equipment:	Sufficient to prevent contact Emergency eyewash and safety shower

9 Physical and chemical properties

General Information:

Physical state:	Powder
Color:	Bluish green
Smell:	Odorless
Molecular Weight (Calculated):	199.66
pH (5% solution)	Not determined
Melting point/range:	115 C
Boiling point/range:	240 C (decomposes)
Sublimation temperature/start:	No data available
Flash point:	Non-flammable
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Danger of explosion:	Product does not present an explosion hazard
Flammable limits:	Non-flammable
Lower:	No data available
Upper:	No data available
Vapor pressure (mm Hg):	No data available
Specific gravity	1.88
Solubility in/Miscibility with water at 15 °C	72 g/L @ 20 C

10 Stability and reactivity

Conditions to be avoided:	No decomposition if used and stored according to specifications See section 7 for information on proper handling and storage
Materials to be avoided:	Strong oxidizers and acids Water / moisture / air Decomposed by heat
Dangerous reactions:	None known
Hazardous decomposition products:	Oxides of copper, carbon monoxide and dioxide

11 Toxicological information

Acute toxicity:	
LD/LC50 values that are relevant for classification:	oral-rat LD ₅₀ : 710 mg/kg
Primary irritant effect:	
on the skin:	Causes skin irritation
on the eye:	Causes serious eye irritation
Sensitization:	No sensitizing effect known
Additional information:	Harmful if swallowed, inhaled, or absorbed through skin. A human poison by ingestion. An experimental poison by an unspecified route. Symptoms of overexposure may include nausea, vomiting, abdominal pain, central nervous system depression. Inhalation may produce irritation to the mucous membranes and upper respiratory system. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

12 Ecological information

Toxicity	
Aquatic toxicity:	No data available
Persistence and degradability:	No further relevant information available
Behavior in environmental systems:	
Bioaccumulative potential:	No further relevant information available
Mobility in soil:	No further relevant information available
Additional ecological information:	
General notes:	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system Do not allow material to be released to the environment without proper governmental permits

13 Disposal considerations

Recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
Unclean packaging recommendation:	Disposal must be made according to official regulations

14 Transport information

Land transport DOT

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Copper (II) acetate, monohydrate

Air transport ICAO-TI and IATA-DGR:

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Copper (II) acetate, monohydrate

UPS Ground / FedEx Ground

Proper shipping name: Chemicals Non-Hazardous
Technical name: Copper (II) acetate, monohydrate

UPS Air

Proper shipping name: Chemicals Non-Hazardous
Technical name: Copper (II) acetate, monohydrate

15 Regulatory information

SARA 302 Components: Not applicable
SARA 311/312 Components: Acute Health Hazard
SARA 313 Components: This product contains chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-to-know Act of 1986 and 40CFR372
California Prop. 65 Components Not applicable
National regulations: All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory
Information about limitation of use: For use only by technically qualified individuals

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.