



Preparing for the New Era of Laboratories

# MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

## **COPPER (II) ACETATE MONOHYDRATE 99% AR**

PRODUCT CODE : O-5071

CAS No : 6046-93-1

FORMULA :  $(\text{CH}_3\text{COO})_2\text{Cu} \cdot \text{H}_2\text{O}$

UN No : 3077

# MATERIAL SAFETY DATA SHEET (SDS/MSDS)

## COPPER (II) ACETATE MONOHYDRATE 99% AR



MSDS Number : 0115

Date : Aug 29<sup>th</sup>, 2024

Version : 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Name** : COPPER (II) ACETATE MONOHYDRATE 99% AR  
**Synonyms** : Cupric acetate monohydrate, Copper (II) ethanoate  
**CAS No.** : 6046-93-1  
**HS Code** : 2915 29 90  
**Molecular Weight** : 199.65 g/mol  
**Chemical Formula** :  $(\text{CH}_3\text{COO})_2\text{Cu} \cdot \text{H}_2\text{O}$   
**Product Code** : O-5071  
**Brand** : Labotiq
- 1.2 Manufacturer** : Labotiq  
**Address** : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111  
**Website** : [www.labotiq.net](http://www.labotiq.net)  
**Email** : [labotiq.id@gmail.com](mailto:labotiq.id@gmail.com),  
**For information** : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710  
**Emergency number** : +6281316894650
- 1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity — Single exposure, Category 3,	H335
Respiratory tract irritation	H400
Hazardous to the aquatic environment — Acute Hazard, Category 1	

For the full text of the H-Statements mentioned in this Section, see Section 16

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

warning

Hazard statement(s)

H302 -

Harmful if swallowed.

H315 -

Causes skin irritation.

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H319 - Causes serious eye irritation.  
 H335 - May cause respiratory irritation.  
 H400 - Very toxic to aquatic life.

### Precautionary statement(s)

P261 - Avoid breathing vapours, spray, dust, fume, gas.  
 P273 - Avoid release to the environment.  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do.  
 Continue rinsing.

Supplemental Hazard Statements none

### 2.3 Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Cupric acetate monohydrate, Copper (II) ethanoate  
 Formula :  $(\text{CH}_3\text{COO})_2\text{Cu} \cdot \text{H}_2\text{O}$   
 Molecular weight : 199.65 g/mol  
 CAS-No. : 6046-93-1  
 EC-No. : 205-553-3  
 Index-No. : -

### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Copper (II) Acetate monohydrate	Acute Tox. 4; Skin Corr. 1B; Aquatic Acute 1; Aquatic Chronic 1; H302, H314, H400, H410 M-Factor - Aquatic Acute: 1	≤ 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

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### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Copper oxides

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary

### **5.4 Further information**

No data available

## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

For disposal see section 13.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

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For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****8.2 Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment****Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Full contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 , Size M)

**Splash contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 , Size M)

**Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Appearance	Form: solid
	Colour: greenish-blue
Odour	Odourless
Odour Threshold	No data available
pH	5.2 - 5.5 at 20 g/l at 20 °C
Melting point/freezing point	Melting point/range: 115 °C
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.882 g/cm <sup>3</sup> at 20 °C
Water solubility	70 g/l at 20 °C - soluble
Partition coefficient: noctanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Not data available
Oxidizing properties	No data available

**9.2 Other safety information**Bulk density 1,000 kg/m<sup>3</sup>**SECTION 10: Stability and reactivity****10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

Oxidizing agents

**10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Copper oxides

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Other decomposition products - No data available  
In the event of fire: see section 5

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

LD50 Oral - Rat - > 300 - < 2,000 mg/kg(Copper di(acetate))

(Fixed Dose Method)

LD50 Dermal - Rat - > 2,000 mg/kg(Copper di(acetate))

(OECD Test Guideline 402)

##### Skin corrosion/irritation

Skin - EPISKIN Human Skin Model Test(Copper di(acetate))

Result: Causes burns.

(OECD Test Guideline 431)

##### Serious eye damage/eye irritation

Eyes - Rabbit(Copper di(acetate))

Result: Risk of serious damage to eyes.

(OECD Test Guideline 405)

##### Respiratory or skin sensitisation

Maximisation Test - Guinea pig(Copper di(acetate))

Does not cause skin sensitisation.

(OECD Test Guideline 406)

Remarks: No data available

##### Germ cell mutagenicity

No data available(Copper di(acetate))

##### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

##### Reproductive toxicity

No data available(Copper di(acetate))

##### Specific target organ toxicity - single exposure

No data available(Copper di(acetate))

##### Specific target organ toxicity - repeated exposure

No data available

##### Aspiration hazard

No data available(Copper di(acetate))

##### Additional Information

RTECS: AG3500000

Symptoms of systemic copper poisoning may include: capillary damage, heada central nervous system excitation followed by depression, jaundice, convu renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, copper deposition in the cornea as exemplified by humans with Wilson's di lead to hemolytic anemia and accelerates arteriosclerosis., Cough, Shortness of breath,

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Headache, Nausea, Vomiting, Gastrointestinal disturbance, Blood disorders, Liver injury may occur.,  
Damage to the lungs.(Copper di(acetate))

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0.39 mg/l - 96.0 h  
(Copper di(acetate))

**12.2 Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

Very toxic to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 3077

IMDG: 3077

IATA: 3077

**14.2 UN proper shipping name**

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(COPPER(II) ACETATE)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(COPPER(II) ACETATE)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(COPPER(II) ACETATE)

**14.3 Transport hazard class(es)**

ADR/RID: 9

IMDG: 9

IATA: 9

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID: Yes

IMDG Marine pollutant: Yes

IATA: Yes

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## 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

### Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

### Further information

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.*

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