



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 28-Sep-2022

Revision Number 6.04

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Copper(II) Acetate Monohydrate
Product Code	032-04022,036-04025

Manufacturer FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741

Supplier FUJIFILM Wako Pure Chemical Corporation

1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan

Phone: +81-6-6203-3741 Fax: +81-6-6203-2029

Fax: +81-6-6203-5964

Emergency telephone number Recommended uses and

+81-6-6203-3741 / +81-3-3270-8571 For research use only

Recommended uses and restrictions on use

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture

Acute toxicity - Oral Category 4

Pictograms



Signal word Warning

Hazard statements

H302 - Harmful if swallowed

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- · Do not eat, drink or smoke when using this product

Precautionary statements-(Response)

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- · Rinse mouth

Precautionary statements-(Storage)

Not applicable

Precautionary statements-(Disposal)

· Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula (CH3COO)2Cu·H2O

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Copper(II) acetate	99.0	199.65	2-693	*	6046-93-1
monohydrate					

Note on ISHL No.: * in the table means announced chemical substances.

Impurities and/or Additives: Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eve contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle In places other than those specified, should not be smoking or eating and drinking Should not be brought contaminated protective equipment and gloves to rest stops Deny unnecessary entry of non-emergency personnel to the handling area

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions Store away from sunlight in well-ventilated place at room temperature (preferably cool).

Keep container tightly closed. Store locked up.

Safe packaging material Polyethylene, Polypropylene Incompatible substances Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Copper(II) acetate	N/A	N/A	TWA: 1 mg/m ³ Cu dust and
monohydrate			mist
6046-93-1			

Personal protective equipment

Respiratory protection Dust mask Hand protection Protection gloves

Eye protection protective eyeglasses or chemical safety goggles

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Color bluish green

Appearance crystals - crystalline powder

Odor characteristic odor Melting point/freezing point 115 °C (dec.)

Boiling point, initial boiling point and boiling range 240 °C

Flammability no data available Evaporation rate: no data available Flammability (solid, gas): no data available

Upper/lower flammability or explosive limits

Upper:no data availableLower:no data availableFlash pointno data available

Auto-ignition temperature:no data availableDecomposition temperature:240 - 260 °CpHacidic (aq.)Viscosity (coefficient of viscosity)no data available

Dynamic viscosity Solubilities n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density

Vapour density Particle characteristics no data available water, Ethanol: soluble. no data available no data available 1.882 no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available

Chemical stability Stable under recommended storage conditions.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Metal oxides

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Copper(II) acetate	710 mg/kg (Rat)	N/A	N/A
monohydrate			

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Copper(II) acetate monohydrate	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
	classification results.	classification results.	classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Copper(II) acetate monohydrate	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
,	classification results	classification results	classification results

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.
Covieus ave demand/invitation	

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Cnemical Name	germ cell mutagencity source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.
Carcinogenicity	

Chemical Name	Carcinogenicity source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information	
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.	
STOT-repeated exposure		
Chemical Name	STOT -repeated exposure- source information	
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.	
Aspiration hazard		
Chemical Name	Aspiration Hazard source information	
Copper(II) acetate monohydrate	Based on the NITE GHS classification results.	

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Copper(II) acetate	N/A	LC50:Pimephales promelas	N/A
monohydrate		1225 ug/L 96 h	

Other data

Chemical Name	Short-term (acute) hazardous to the aquatic environment source aquatic environment sou	
	information	information
Copper(II) acetate monohydrate	Based on the NITE GHS classification	Based on the NITE GHS classification
	results.	results.

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Hazard to the ozone layer

No information available
No information available
No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID Not regulated

UN number -

Proper shipping name: UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Dooking group

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name:

UN classfication Subsidiary hazard class Packing group

Environmentally Hazardous

Not applicable

Substance

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS - TSCA -

Japanese regulations

Fire Service Act Not applicable

Poisonous and Deleterious Deleterious Substances 3rd. Grade

Substances Control Law

Industrial Safety and Health Act Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57,

Para.1, Enforcement Order Art.18)

Notifiable Substances (Law Art.57-2, Enforcement Oder Art.18-2 Attached Table

No.9)No.379 Not applicable

Regulations for the carriage

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable

Pollutant Release and Transfer Class 1

Register Law (~2023.3.31)

Class 1 - No. 272

Pollutant Release and Transfer Class 1

Register Law (2023/4/1~)

<u>Class 1 - No.</u> <u>272</u>

Water Pollution Control Act Specified substances(Law Art.2 Para.4, Enforcement Order Art.3-3)

Export Trade Control Order Not applicable

Air Pollution Control Law Hazardous Air Pollutants

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2) (~2024.3.31)	Pollutant Release and Transfer Register Law (~2023.3.31)
Copper(II) acetate monohydrate 6046-93-1 (99.0)	Applicable	Applicable	Applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)

http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations

RTECS:Registry of Toxic Effects of Chemical Substances
Japan Industrial Safety and Health Association GHS Model SDS

Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet