

GHS Safety Data Sheet

MSDS No. : CUE01PAEG

Date Issued: 2010/03/16
Last Updated:2014/06/19

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: Cu Copper Powder

Product number:	Purity	Size (μm)	Product number:	Purity	Size (μm)
CUE01PB	99%up(2Nup)	180 pass	CUE09PB	99.999%(5N)	850 pass
CUE02PB	99%up(2Nup)	75~150	CUE10PB	99%up(2Nup)	150 pass
CUE03PB	99%up(2Nup)	75 pass	CUE11PB	99.9%up(3Nup)	75 pass
CUE04PB	99.9%(3N)	180 pass	CUE12PB	99.9%(3N)	ca. 5
CUE05PB	99.9%(3N)	75~150	CUE13PB	99.9%(3N)	45 pass
CUE06PB	99.9%(3N)	75 pass	—	99.999%(5N)	106 pass
CUE08PB	99.99%(4N)	ca. 1			

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd
 1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284
 Phone: +81-49-284-1511 Fax: +81-49-284-1351
 Emergency Phone : +81-49-284-1511

Section 2. Hazards identification

GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Specific target organ toxicity, single exposure ; Category 3 Specific target organ toxicity, repeated exposure ; Category 1	Hazardous to the aquatic environment, chronic toxicity ; Category 4	Not classifid.

GHS Label: CW



Pictograms or symbols

Warning word: DANGER

Hazard information

May cause respiratory irritation.
 Causes damage to organ (Liver) through
 prolonged or repeated exposure.
 May cause long lasting harmful effects to
 aquatic life.

Description of precaution

Wear protective gloves/protective clothing/eye protection
 /respiratory protection/face protection during handling.
 Avoid breathing dust/fume/spray.
 Do not eat, drink or smoke when using this product, and wash
 hands thoroughly after handling.
 Avoid release to the environment and collect spillage.
 IF INHALED: Remove victim to fresh air and keep at rest in
 a position comfortable for breathing.
 Call a POISON CENTER or doctor/physician if you feel unwell.

	Protect from sunlight. Store in a cool, dry and well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/ container in accordance with local/national regulations.
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Additional hazard information :

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Copper
Chemical formula:	Cu
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7440-50-8
RTECS#:	GL5325000
TSCA inventory:	listed
EINECS:	2311596

Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.

Section 5. Fire fighting measures

Extinguishing media:	This product cannot catch fire. Use media appropriate for surrounding fire.
Fire fighting:	Self-contained breathing apparatus and full protective clothing should be used, if the material is involved in fire. The product is nonflammable.
Specific hazards arising from the chemical:	Heating may liberate flammable gases.
Combustion products:	Copper oxide

Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust/ fume.
Environmental hazard precautions:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.

Method for containment and cleaning up:

Indoor leakage: Ventilate as much as possible until the cleaning is completed.

Outdoor leakage: Work from the windward and evacuate the leeward crowd.

Gather up, pack in closed container as much as possible.

Carefully collect remnant and move to a safe place.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling: Use protective wears and local ventilation equipment, if inhalation or skin contact is foreseen.

Precautions to be taken in storage:

General precautions: Store in a cool, dry place away from incompatible materials.
Keep container or bottle tightly closed.

Section 8. Exposure controls / personal protection

Exposure guideline: ACGIH (2013): Dusts and mists 1 mg/m³ (as Cu) , Fume 0.2 mg/m³ (as Cu)
OSHA (2006): Dusts and mists 1 mg/m³ (as Cu) , Fume 0.1 mg/m³ (as Cu)

Facility measures: Local ventilation of closed work room or total proper ventilation to prevent inhalation.

Protective ware: Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, protective gloves.

Section 9. Physical and chemical properties

Color and Form: Reddish, lustrous solid, odorless.

Chemical formula: Cu

Atomic weight: 63.55

Melting point: 1083.4 °C

Boiling point: 2567 °C

Density: 8.96 g/cm³

Solubility Water: Insoluble

Dissoluble: Nitric acid, conc. sulfuric acid.

Insoluble: Hydrochloric acid

Flammable: non-flammable substance

Oxidation: None

Section 10. Stability and reactivity

Stability: Stable in closed container.

Reactivity

Incompatibility: Strong acids, strong oxidizing agent, acid chlorides, halogens.

Condition to avoid: Air, moisture.

Hazardous decomposition products.: Copper oxide (by heating)

Section 11. Toxicological information

Acute toxicity:	GHS ; No data available
Skin corrosive / irritation:	GHS ; No data available
Serious eyes damage / eye irritation:	GHS ; No data available
Respiratory sensitization:	GHS ; No data available
Skin sensitization:	GHS ; No data available
Germ cell mutagenicity:	GHS ; No data available
Carcinogenicity:	GHS ; Not classified.; Falls below the lowest level. Cu EPA(1991) class D (Not classifiable as to human carcinogenicity)
Reproductive toxicity:	GHS ; No data available
Specific target organ toxicity —single exposure:	GHS ; Category 3 May cause respiratory irritation
Specific target organ toxicity —repeated exposure:	GHS ; Category 1 Causes damage to organs(Liver)through prolonged or repeated exposure
Aspiration hazard:	GHS ; No data available
Other cautions:	Mechanical stimulation by dust affects eyes, skin and respiratory system

Section 12. Ecological information

Ecotoxicity:	
Hazards to the aquatic environment —acute toxicity:	GHS ; No data available
Hazards to the aquatic environment —chronic toxicity:	GHS ; Category 4 May cause long lasting harmful effects to aquatic life
Hazardous the ozone layer:	No data available No Freon or Halon
Fish toxicity:	No data available
Degradability:	No data available
Bioaccumulative potential:	Cu biological half-life 80 day, Rate of absorption oral=0.28, Respiratory tract=0.39
Mobility in soil:	No data available

Section 13. Disposal considerations

Disposal method:	User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.
------------------	-----------------------------------------------------------------------------------------------------------------------------

Section 14. Transport information

UN classification:	Non-hazards
UN number:	None
HS code:	7406.10
Marine pollution:	None

Precautions: Container should be transported in a secure position, in a well-ventilated vehicle.

Section 15. Regulatory information

TSCA inventory : listed.

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.