Date Issued: 2013/04/11

GHS Safety Data Sheet

MSDS No. : CUH01XAEG

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

1.1 Product Information

Product name: CuCl Copper(I) chloride, anhydrous

Product number:	Purity	Form	Size or Shape
CUH06XB	99.9% (3N)	solid	_

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
Acute toxicity(Oral) : Category 3 Acute toxicity(Inhalation: dusts,mist) : Category 3	Hazardous to the aquatic environment, acute toxicity : Category 1 chronic toxicity : Category 1	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified Oxidizing solids : Not classified
GHS Label: ⊤∨ Pictograms or symbols		
Warning word: DANGER	Γ	
Hazard information	Description of precaution	
Toxic if swallowed Toxic if inhaled Very toxic to aquatic life Very toxic to aquatic life with long lasting effects	 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. Use only outdoors or in well-ventilated area. 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. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Immediately call a POISON CENTER or doctor/physician. 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 :

In case of fire, liberates toxic gases/fume.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients

Chemical or common name:	Copper(I) chloride
Chemical formula:	CuCl
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	7758-89-6
RTECS#:	GL6990000
TSCA inventory:	listed
EINECS:	2318429

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: The product is nonflammable.

Specific hazards arising from the chemical:

Produces toxic fumes and gases.

Combustion products:

Copper oxides, hydrogen chloride.

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:		
	Avoid unnecessary contacts with spills.	
	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: Handling worker wears suitable protective clothing. Avoid prolonged or repeated exposure.

Precautions to be taken in storage:

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

Section 8. Exposure controls / personal protection

Exposure guideline:	ACGIH (2012): No data available OSHA (2006): No data available
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, face shields, protective gloves.

Section 9. Physical and chemical properties

Color and Form:	Solid, odorless.
Chemical formula:	CuCl
Formula weight:	99.0
Melting point:	430 °C
Boiling point:	1490 °C
Density:	4.14 g/cm^3
Water Solubility:	Insoluble
Flammable:	non-flammable substance
Oxidation:	None

Section 10. Stability and reactivity

Stability:	Stable in closed container.
Reactvity	
Incompatibility:	Oxidizing agents and alkali metals.
Condition to avoid:	Heat, light, moisture, air.
Hazardous decomposition products.: Copper oxides, hydrogen chloride.	

Section 11. Toxicological information

Acute toxicity(Oral):	GHS : Category 3 ; Toxic if swallowed
	CuCl oral rat LD50 = 140 mg/kg (RTECS(2000))
Acute toxicity(Dermal) :	GHS : No data available
Acute toxicity(inhalation: vapor) :	GHS : No data available
Acute toxicity(inhalation: dusts, mist):	GHS: Category 3; Toxic if inhaled
	CuCl inhalationl mouse $LC50 = 1.0 \text{mg/L} (RTECS(2000))$
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 : No data available
Reproductive toxicity:	GHS : No data available
Specific target organ toxicity	
-single exposure:	GHS : No data available
Specific target organ toxicity	CHC: N. Jata and I.L.
-repeated exposure:	GHS : No data available

Aspiration hazard: GHS : No data available

Other cautions: Mechanical stimulation by dust affects eyes, skin and respiratory system

Ecotoxicity:		
Hazards to the aquatic enviro	onment	
-acute toxicity:	GHS: Category 1; Very toxic to aquatic life	
-chronic oxicity:	GHS: Category 1; Very toxic to aquatic life with long lasting effects.	
Hazrdous the ozone layer:	GHS; No data available	
	No Freon or Halon	
Fish toxicity:	CuCl Fish(Rainbow trout) LC50 = 0.018mg/L(96hr)	
Degradability:	No data available	
Bioaccumulative potential:	No data available	
(ref.)	Cu Biological half-life 80 day,	
	Rate of absorption oral =0.28, Respiratory tract=0.39	
Mobility in soil:	No data available	
Castion 19 Dismonal		

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

2802
Copper chloride
Hazardous Class 8 (Corrosive substances)
Ш
2827.39
Yes

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.