

Revision: 2.1

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## Section 1. Identification

### 1.1 Product Identifier 0993

Product Name COPPER (II) CHLORIDE 2H<sub>2</sub>O pure

CAS Number 10125-13-0

REACH Registration No 01-2119970306-36-XXXX

Molecular Formula  $CuCl_2 \cdot 2H_2O = 170.48$

### 1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

### 1.3 Supplier Vickers Laboratories Ltd



Grangefield Industrial Estate  
Richardshaw Road  
Pudsey  
West Yorkshire  
LS28 6QW  
UNITED KINGDOM

Phone 44 0113 2362811  
Fax +44(0)113 2362703  
Email [safety@viclabs.co.uk](mailto:safety@viclabs.co.uk)  
Website [www.viclabs.co.uk](http://www.viclabs.co.uk)

### 1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

#### Classification according to regulation 1272/2008/EC

Acute toxicity, category 4 (oral)

Skin corrosion/irritation, category 2

Acute toxicity, category 4 (dermal)

Serious eye damage/irritation, category 1

Hazard to aquatic environment, category 1

Hazard to aquatic environment, category 2

H302: Harmful if swallowed.

H315: Causes skin irritation.

H312: Harmful in contact with skin.

H318: Causes serious eye damage.

H400: Very toxic to aquatic life.

H411: Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



**Hazard Statements** Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.

**Precautionary Statements** Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

## Section 3. Composition

### 3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Copper	7440-50-8		01-2119480154-42-XXXX	37.2%	Aquatic Acute 1, Aquatic Chronic 3

## Section 4. First Aid

### 4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

### 4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

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

Hazards	May evolve toxic fumes if involved in a fire.
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### 5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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## Section 6. Accidental Release Measures

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

Personal Protection	Avoid breathing dust-wear respiratory protective equipment.
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### 6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

### 6.3 Methods and material for containment and cleaning up

Major Spillage Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

Minor Spillage Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

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

Well ventilated, cool, dry storage .

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period
Copper	7440-50-8	37.2%	-	-

Exposure data source(s) No occupational exposure data currently available.

### 8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.  
Hand Protection Wear gloves.  
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.  
Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.  
Special Hazards No special precautions required.

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance Pale blue-green powder.  
Odour No specific odour.  
pH 3 @ 20 °C 10%  
Boiling Point 993 °C  
Melting Point 598 °C  
Flash Point Not applicable  
Upper Flammable Limit Not applicable  
Lower Flammable Limit Not applicable  
Auto Ignition Not applicable  
Explosive Properties No.  
Oxidising Properties No.  
Vapour Pressure Not applicable

Relative Density	3.400
Water Solubility	757 g/L

## 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

10.1 Reactivity	No data available.
10.2 Chemical Stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	No data available.
10.4 Conditions to Avoid	No specific conditions.
10.5 Incompatible Materials	No specific materials to avoid.
10.6 Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

Eyes	Causes serious eye damage.
Skin	Contact with the solid or dust may irritate to the skin. Harmful in contact with skin.
LD50 Skin	Not available
Ingestion	Harmful if swallowed.
LD50 Oral	584 mg/Kg Rat
Inhalation	Inhalation of dust may produce irritation of the eyes and respiratory tract.
LD50 Inhalation	1224 mg/Kg Rat
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

## Section 12. Ecological

12.1 Toxicity	Not biodegradable : highly water contaminating. Known to be toxic to aquatic organisms : no data available.
LC50 Algal	Not available
LC50 Crustacea	Not available
LC50 Fish	Not available
12.2 Persistence and degradability	No data available.
12.3 Bioaccumulative potential	No data available.
12.4 Mobility in soil	No data available.
12.5 Results of PBT & vPvB assessment	Assessment not required.
12.6 Other adverse effects	None known at present.

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

Disposal Methods	Dispose of to a licensed land fill site.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

## Section 14. Transport Information

14.1 UN Number	2802
14.2 Proper Shipping Name	Copper chloride
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	80
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	Marine pollutant.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Skin corrosion/irritation, category 2; Acute toxicity, category 4 (oral); Acute toxicity, category 4 (dermal); Serious eye damage/irritation, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H302, H312, H315, H318, H401+H411 Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye damage. Toxic to aquatic life with long lasting effects.
Precautionary Statements	P280, P264, P305+P351+P338, P301+P312, P330 Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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