Vickers Laboratories Ltd - Safety Data Sheet 1000

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 2.1 Revision date: 16 April 2021
Date printed: 03 February 2023

Section 1. Identification

1.1 Product Identifier 1000

Product Name COPPER (I) OXIDE pure

CAS Number 1317-39-1
REACH Registration No 01-2119513794-36-XXXX

Molecular Formula Cu_2O =143.09

1.2 Relevent identified uses of the substance or mixure & uses advised against

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

1.3 Supplier Vickers Laboratories Ltd

VICKERS LABORATORIES

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
Website 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)	H302: Harmful if swallowed.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 1	H318: Causes serious eye damage.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very 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 if inhaled. Causes serious eye damage. Very 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)
Cuprous oxide	1317-39-1	215-270-7	01-2119513794-36-XXXX	<95%	Acute Tox. 4 (O),Acute Tox. 4 (I),Eye Dam. 1,Aquatic Acute 1,Aquatic Chronic 1

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. If breathing stops or shows signs of failing, apply artificial resuscitation. If breathing is difficult, give oxygen. OBTAIN MEDICAL ATTENTION.
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.

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.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Wear goggles, respirator, rubber boots and heavy rubber gloves. Avoid breathing dust-wear respiratory protective equipment.

6.2 Environmental precautions

Enviromental	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	Sweep up, place in a bag and hold for waste disposal.

Minor Spillage	Sweep up, place in a bag and hold for waste disposal.

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)	
Cuprous oxide	1317-39-1	<95%	-	-	-	-

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

8.2 Exposure controls

Respiratory Protection	Wear NIOSH/MSHA-approved respirator.
Hand Protection	Wear rubber 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	Red crystalline powder.
Odour	No specific odour.
pH	Not applicable
Boiling Point	Not available
Melting Point	>400 °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	5.870
Water Solubility	Not specified.

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	Protect from moisture.
10.5	Incompatable Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	None.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust will be irritating to the eyes.
Skin	Contact with the solid or dust may irritating to the skin.
LD50 Skin	>2000 mg/Kg Rat
Ingestion	Toxic if swallowed. May cause damage to central nervous system and kidneys.
LD50 Oral	928-2000 mg/Kg Rat
Inhalation	Inhalation of dust may produce irritation of the eyes and respiratory tract. The powder may be harmful.
LD50 Inhalation	>200 mg/L 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	92.6 µg/L Daphnia magna (48 hours)
	LC50 Fish	227 µg/L Fathead Minnow (96 hours)
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.

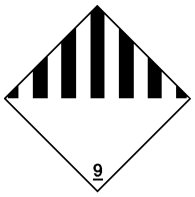
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of to a licensed land fill site. Dissolve or mix the material with a combustible solvent. Burn in a chemical incinerator equipped with afterburners and scrubbers.
Contaminated Packaging	Dispose of to a licensed land fill site. Dissolve or mix the material with a combustible solvent. Burn in a chemical incinerator equipped with afterburners and scrubbers.

Section 14. Transport Information

14.1	**UN Number**	3077
14.2	**Proper Shipping Name**	Environmentally hazardous substance, solid, N.O.S. (Cuprous Oxide)
14.3	**Transport classes**	
	UN classification	9
	Subsidiary hazard(s)	None
	Transport category	3
	ADR Hazard ID	90
	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 subtance/mixture.

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

Classification: Acute toxicity, category 4 (oral); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word: Danger

Hazard Pictograms

Hazard Statements: H302, H332, H318, H410
Harmful if swallowed. Harmful if inhaled. Causes serious eye damage. Very 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.

Revision number: 2.1 (Supercedes revision 2.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 03 February 2023