

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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Copper

Revision 2

Revision date 2014-03-21

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	Copper
CAS No.	7440-50-8
EC No.	231-159-6

1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [SU24] Scientific research and development; [PC21] Laboratory chemicals; [PROC15] Use as laboratory reagent; [ERC8b] Wide dispersive indoor use of reactive substances in open systems;
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1.3. Details of the supplier of the safety data sheet

Company	Elemental Microanalysis Ltd
Address	Hameldown Road Okehampton Business Park Exeter Road Okehampton Devon EX20 1UB United Kingdom
Web	www.microanalysis.co.uk
Telephone	+44 (0) 1837 54446
Fax	+44 (0) 1837 54544
Email	info@microanalysis.co.uk
Email address of the competent person	.

1.4. Emergency telephone number

Emergency telephone number	+44 (0) 7990 767375 (24 hours)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 67/548/EEC	Xi; R36/37/38 Symbols: Xi: Irritant.
Main hazards	Irritating to eyes, respiratory system and skin.
2.1.2. Classification - EC 1272/2008	Aquatic Chronic 4: H413;

2.2. Label elements

Hazard Statement	Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life.
Precautionary Statement: Prevention	P273 - Avoid release to the environment.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to a licensed waste disposal company

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2.3. Other hazards

Other hazards	Not determined.
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SECTION 3: Composition/information on ingredients

3.1. Substances

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Copper		7440-50-8	231-159-6			Xi; R36/37/38

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Copper		7440-50-8	231-159-6			Aquatic Chronic 4: H413;

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious, check for breathing and apply artificial respiration if necessary. Seek medical attention.
Eye contact	Contact lenses should be removed. Rinse immediately with plenty of water for 15 minutes. Seek medical attention.
Skin contact	Wash with soap and water.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed, rinse mouth with water (only if the person is conscious). DO NOT INDUCE VOMITING. Seek medical attention.

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

Inhalation	MAY BE HARMFUL IF SWALLOWED. May cause irritation to respiratory system.
Eye contact	May be harmful by ingestion, inhalation or if absorbed through the skin. May cause irritation to eyes.
Skin contact	May cause irritation to skin.
Ingestion	Not determined.

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

Inhalation	Not determined.
Eye contact	Not determined.
Skin contact	Not determined.
Ingestion	Not determined.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical. Water spray.
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5.2. Special hazards arising from the substance or mixture

	Not determined.
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5.3. Advice for firefighters

	Wear suitable respiratory equipment when necessary.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Appropriate local exhaust ventilation is required. Avoid contact with eyes and skin. Avoid formation of dust. Avoid raising dust. Do not breathe dust. Do not breathe gas/fumes/vapour/spray. Evacuate personnel to a safe area. Use appropriate personal protective equipment.
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6.2. Environmental precautions

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6.2. Environmental precautions

Do not allow product to enter drains.

6.3. Methods and material for containment and cleaning up

Avoid raising dust. Sweep up. Keep container tightly closed and in a well-ventilated place. Keep container tightly closed in a cool place.

6.4. Reference to other sections

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Appropriate local exhaust ventilation is required. Wear suitable protective equipment. Wash hands after handling the product. Do not breathe dust or vapour.

7.2. Conditions for safe storage, including any incompatibilities

Not determined.

7.3. Specific end use(s)

Not determined.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

Copper	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 0.2
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 1
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: 2

8.2. Exposure controls



Eye / face protection

Wear eye/face protection. May cause irritation to skin and eyes.

Skin protection -

Handprotection

Wear suitable gloves. May cause irritation to skin.

Skin protection - Other

Wear suitable protective clothing.

Respiratory protection

Suitable respiratory equipment. May cause respiratory irritation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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9.1. Information on basic physical and chemical properties

State	Granules.
Colour	Amber
Odour	Odourless
Partition coefficient	Not determined
Autoignition temperature	Not determined
Viscosity	Not determined
Explosive	Not determined
Oxidising	Not determined
pH	Not determined
Melting point	1085 °C
Freezing Point	Not determined
Boiling point	2567 °C
Flash point	Not determined
Evaporation rate	Not determined
Flammability limits	Not determined
Vapour Flammability	Not determined
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	9.1 (Water = 1 @ 20 °C)
Fat Solubility	Not determined
Solubility	Slightly soluble in water

9.2. Other information

Conductivity	Not determined
Surface tension	Not determined
Gas group	Not determined
Benzene Content	Not determined
Lead content	Not determined
VOC (Volatile organic compounds)	Not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Not determined.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Not determined.

10.5. Incompatible materials

Strong acids. Strong oxidising agents. Halogens, Acid chlorides.

10.6. Hazardous decomposition products

Not determined.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

May cause respiratory irritation. May cause severe irritation to eyes and skin. May be harmful by ingestion, inhalation or if absorbed through the skin.

11.1.4. Toxicological Information

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11.1.4. Toxicological Information

Not determined

SECTION 12: Ecological information

12.1. Toxicity

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Daphnia EC50/48h: 0.04 mg/l

Fish LC50/96h: 0.1500 mg/l

12.2. Persistence and degradability

BCF 108.

12.3. Bioaccumulative potential

Cyprinus Carp - 40d.

12.4. Mobility in soil

Not determined.

12.5. Results of PBT and vPvB assessment

Not determined.

12.6. Other adverse effects

May cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact a licensed waste disposal company.

SECTION 14: Transport information

14.6. Special precautions for user

Refer to sections 1.2, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12 & 13.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not determined.

ADR/RID

The product is not classified as dangerous for carriage.

IMDG

The product is not classified as dangerous for carriage.

IATA

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulations

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

- 2 - Precautionary Statement: Disposal.
- 4 - Inhalation.

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Other information

	<p>4 - Eye contact. 4 - Skin contact. 11 - Acute toxicity. 14 - 14.6. Special precautions for user. 14 - 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code. 15 - 15.2. Chemical safety assessment.</p>
Text of risk phrases in Section 3	R36/37/38 - Irritating to eyes, respiratory system and skin.
Text of Hazard Statements in Section 3	Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life.

Further information

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This 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 other process.</p>
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