

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 1 of 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Copper, powder, 25 g

CAS No: 7440-50-8

EC No: 231-159-6

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

Laboratory chemicals

1.3. Details of the supplier of the safety data sheet**Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH

Street: Im Forstgarten 1

Place: D-66459 Kirkel

Internet: www.conatex.com

Supplier

Company name: Carbolution Chemicals GmbH

Street: Im Stadtwald, Gebäude A1.2

Place: D-66123 Saarbrücken

Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232

e-mail: michael.bauer@carbolution-chemicals.de

Internet: www.carbolution-chemicals.de

1.4. Emergency telephone number: +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: F - Highly flammable, N - Dangerous for the environment

R phrases:

Highly flammable.

Very toxic to aquatic organisms.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Flammable solid: Flam. Sol. 1

Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor (self-classification) = 1)

Hazard Statements:

Flammable solid.

Very toxic to aquatic life.

2.2. Label elements

Signal word:

Danger

Pictograms:

GHS02-GHS09



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 2 of 7

Hazard statements

H228 Flammable solid.
H400 Very toxic to aquatic life.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of contents/container to Waste management.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: Cu
Molecular weight: 63,55

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
231-159-6	Copper, powder	100 %
7440-50-8	F - Highly flammable, N - Dangerous for the environment R11-50	
	Flam. Sol. 1, Aquatic Acute 1; H228 H400	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water. Change contaminated clothing.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 3 of 7

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Avoid generation of dust. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation. Remove persons to safety. Do not breathe dust.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up dust-free and set down dust-free. Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Advice on protection against fire and explosion

Only use the material in places where open light, fire and other flammable sources can be kept away.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7440-50-8	Copper, dusts and mists (as Cu)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

8.2. Exposure controls

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 4 of 7

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid
 Colour: light red
 Odour: No data available

Test method

pH-Value: No data available

Changes in the physical state

Melting point: 1083 °C
 Initial boiling point and boiling range: 2567 °C
 Sublimation point: No data available
 Softening point: No data available
 Flash point: No data available

Flammability

Solid: No data available
 Gas: No data available

Lower explosion limits: No data available
 Upper explosion limits: No data available
 Ignition temperature: No data available

Auto-ignition temperature

Solid: No data available
 Gas: No data available

Vapour pressure: No data available
 Vapour pressure: No data available

Density: No data available

Water solubility: No data available

Partition coefficient: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic: No data available

Flow time: No data available

Vapour density: No data available

Evaporation rate: No data available

Solvent separation test: No data available

Solvent content: No data available

9.2. Other information

Solid content: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.3. Possibility of hazardous reactions

No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 5 of 7

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Toxicological data are not available.

Acute toxicity

Toxicological data are not available.

Irritation and corrosivity

No data available

Sensitising effects

No data available

Severe effects after repeated or prolonged exposure

No data available

Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

Specific effects in experiment on an animal

No data available

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Practical experience**Observations relevant to classification**

No data available

SECTION 12: Ecological information**12.1. Toxicity**

Very toxic to aquatic life.

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 and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 6 of 7

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN3089
14.2. UN proper shipping name:	METAL POWDER, FLAMMABLE, N.O.S.
14.3. Transport hazard class(es):	4.1
14.4. Packing group:	II
Hazard label:	4.1
Classification code:	F3
Special Provisions:	552
Limited quantity:	1 kg
Transport category:	2
Hazard No:	40
Tunnel restriction code:	E

Other applicable information (land transport)

E2

Inland waterways transport (ADN)

14.1. UN number:	UN3089
14.2. UN proper shipping name:	METAL POWDER, FLAMMABLE, N.O.S.
14.3. Transport hazard class(es):	4.1
14.4. Packing group:	II
Hazard label:	4.1
Classification code:	F3
Special Provisions:	552
Limited quantity:	1 kg

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Copper, powder, 25 g

Print date: 14.04.2015

Product code: 9991472

Page 7 of 7

Other applicable information (inland waterways transport)

E2

Marine transport (IMDG)

14.1. UN number:	UN3089
14.2. UN proper shipping name:	METAL POWDER, FLAMMABLE, N.O.S.
14.3. Transport hazard class(es):	4.1
14.4. Packing group:	II
Hazard label:	4.1
Special Provisions:	-
Limited quantity:	1 kg
EmS:	F-G, S-G

Other applicable information (marine transport)

E2

Air transport (ICAO)

14.1. UN number:	UN3089
14.2. UN proper shipping name:	METAL POWDER, FLAMMABLE, N.O.S.
14.3. Transport hazard class(es):	4.1
14.4. Packing group:	II
Hazard label:	4.1
Special Provisions:	A3
Limited quantity Passenger:	5 kg
IATA-packing instructions - Passenger:	445
IATA-max. quantity - Passenger:	15 kg
IATA-packing instructions - Cargo:	448
IATA-max. quantity - Cargo:	50 kg

Other applicable information (air transport)

E2

: Y441

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

SECTION 16: Other information

Relevant R-phrases (Number and full text)

11	Highly flammable.
50	Very toxic to aquatic organisms.

Relevant H- and EUH-phrases (Number and full text)

H228	Flammable solid.
H400	Very toxic to aquatic life.