

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Copper(I) chloride, 25 g

Print date: 14.04.2015

Product code: 9991480

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

##### 1.1. Product identifier

Copper(I) chloride, 25 g

CAS No: 7758-89-6  
Index No: 029-001-00-4  
EC No: 231-842-9

##### 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: Xn - Harmful, N - Dangerous for the environment  
R phrases:  
Harmful if swallowed.  
Very toxic to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

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

Hazard categories:  
Acute toxicity: Acute Tox. 4  
Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor = 1)  
Hazardous to the aquatic environment: Aquatic Chronic 1 (M-Factor = 1)  
Hazard Statements:  
Harmful if swallowed.  
Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

##### 2.2. Label elements

###### Hazardous components which must be listed on the label

copper (I) chloride, copper chloride, cuprous chloride

Signal word: Warning

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Pictograms:

GHS07-GHS09



#### Hazard statements

H302 Harmful if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.

#### 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: 99,00  
Molecular weight: ClCu

#### 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]	
231-842-9	copper (I) chloride, copper chloride, cuprous chloride	100 %
7758-89-6	Xn - Harmful, N - Dangerous for the environment R22-50-53	
029-001-00-4	Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H302 H400 H410	

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

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

##### After ingestion

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.

#### 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.

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**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.

**Additional information**

Suppress gases/vapours/mists with water spray jet. 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**

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

**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 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. Do not breathe dust.

**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****8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

**Protective and hygiene measures**

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. 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

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be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	colourless
Odour:	No data available

#### Test method

pH-Value (at 20 °C):	5	50 g/l
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#### Changes in the physical state

Melting point:	430 °C
Initial boiling point and boiling range:	1490 °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: (at 546 °C)	1,7 hPa
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Vapour pressure:	No data available
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Density:	4,14 g/cm <sup>3</sup>
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Bulk density:	1,7 kg/m <sup>3</sup>
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Water solubility:	No data available
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Partition coefficient:	No data available
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Viscosity / dynamic:	No data available
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Viscosity / kinematic:	No data available
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Flow time:	No data available
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Vapour density:	No data available
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Evaporation rate:	No data available
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Solvent separation test:	No data available
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Solvent content:	No data available
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### 9.2. Other information

Solid content:	No data available
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available

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#### 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

No data available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

Toxicological data are not available.

##### Acute toxicity

Acute toxicity, dermal.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
7758-89-6	copper (I) chloride, copper chloride, cuprous chloride				
	oral	ATE	500 mg/kg		

##### 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 organisms, may cause long-term adverse effects in the aquatic environment.

#### 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

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**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).

**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)**

<b>14.1. UN number:</b>	UN 2802
<b>14.2. UN proper shipping name:</b>	COPPER CHLORIDE
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	III
Hazard label:	8
Classification code:	C2
Limited quantity:	5 kg
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	UN 2802
<b>14.2. UN proper shipping name:</b>	COPPER CHLORIDE
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	III
Hazard label:	8
Classification code:	C2

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Limited quantity: 5 kg

#### Other applicable information (inland waterways transport)

E1

#### Marine transport (IMDG)

**14.1. UN number:** UN 2802

**14.2. UN proper shipping name:** COPPER CHLORIDE

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** III

Hazard label: 8

Marine pollutant: P

Special Provisions: -

Limited quantity: 500 g

EmS: F-A, S-B

#### Other applicable information (marine transport)

E1

#### Air transport (ICAO)

**14.1. UN number:** UN 2802

**14.2. UN proper shipping name:** COPPER CHLORIDE

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** III

Hazard label: 8

Special Provisions: A803

Limited quantity Passenger: 5 kg

IATA-packing instructions - Passenger: 860

IATA-max. quantity - Passenger: 25 kg

IATA-packing instructions - Cargo: 864

IATA-max. quantity - Cargo: 100 kg

#### Other applicable information (air transport)

E1

: Y845

#### 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)

22 Harmful if swallowed.

50 Very toxic to aquatic organisms.

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

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

H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.