

**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 |
|----------------------|----------|

#### 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:<br>(at 546 °C) | 1,7 hPa |
|---------------------------------|---------|

|                  |                   |
|------------------|-------------------|
| Vapour pressure: | No data available |
|------------------|-------------------|

|               |                        |
|---------------|------------------------|
| Density:      | 4,14 g/cm <sup>3</sup> |
| Bulk density: | 1,7 kg/m <sup>3</sup>  |

|                   |                   |
|-------------------|-------------------|
| 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

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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. |