

SAFETY DATA SHEET



according to EC Directive 2001/58/EC

Supersedes edition of: 26-03-2004

Date of issue: 26-03-2004

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Trade name: WUXAL® Copper

Product-No.: 22406

1 Company

Manufacturer/Supplier: AGLUKON Spezialdünger GmbH & Co. KG Telephone: +49 (0)211 5064-0
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40549 Düsseldorf, Germany
Informing department: Quality Control Telephone: +49 (0)211 5064-250
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Emergency telephone (D/Berlin): Telephone No.: +49(0)30 - 19240 (Day and Night)

2 Composition/Information on Ingredients

Preparation: Copper-fertilizer suspension.
Description: Metal salt mixture with chelating agent.
Use: Fertilizer.

Harmful components:

Marking	CAS-No.	Limits (%)	Danger symbol	R-phrases
Copper sulfate pentahydrate	7758-99-8	2,5 - 25	Xn: Harmfull N: Dangerous for the environment	22-36/38-50/53

Additional information:

3 Hazards Identification

Hazards designation: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 First-Aid Measures

General hints: Remove soiled clothes.
after inhalation of aerosols/vapours: Take out to the fresh air, rest quiet and warm. Medical assistance is necessary in case of difficulty in breathing.
after skin contact: Immediately wash affected skin regions thoroughly with soap and plenty of water.
after eyes contact: Thoroughly wash eyes with lids wide apart under running water (protect the uninjured eye, remove contact lenses).
after ingestion: Consult the doctor in case of persistent trouble.

5 Fire-Fighting Measures

Suitable extinguishing media: Water, carbon dioxide, dry extinguishing media, foam.
Unsuitable extinguishing media: Unknown.
Specific hazards: The material itself is hardly inflammable. If larger quantities of the product are on fire, the formation of sulfuric acid gases, nitrous gases is possible.
Special equipment to protect firefighters: Do not stay in dangerous zone without suitable chemical protecting clothes and selfcontained breathing apparatus.
Other information: Contain escaping vapours with water.
Prevent fire-fighting water from entering surface water or ground-water.

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6 Accidental Release Measures

Personal precautions:	Avoid substance contact. Wear closed working clothes, protecting glasses and hand protection. Remove immediately soiled and soaked clothes.
Specific hazards:	The material itself is hardly inflammable. If larger quantities of the product are on fire, the formation of sulfuric acid gases, nitrous gases and ammonia is possible.
Special equipment to protect firefighters:	Do not stay in dangerous zone without suitable chemical protecting clothes and self-contained breathing apparatus.
Other information:	Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or ground-water.
Environmental precautions:	Ensure that the product does not reach the ground-water, water bodies or the drainage system.
Methods for cleaning up/taking up:	Take up with absorption media. Disposal of contaminated material as waste according to point 13.
Additional hints:	

7 Handling and Storage

Handling

Advice as to safe handling:	Use only in well ventilated areas. Wear suitable protecting clothes. Remove immediately soiled and soaked clothes. See point 8.
Advice to prevent fire and explosion:	No further requirements.

Storage

Requirements on stockrooms and containers:	Protect the product from impurity and drying up. Keep containers densely closed. Do not store in metal containers (corrosion risk).
Storage together with other materials:	Do not store together with food and luxury food, beverage and feed.
Storage class	12 Liquid product with no fire risk in package with no fire risk. <small>(National regulation, Germany: VCI-concept)</small>
VbF class:	None. <small>(National regulation, Germany)</small>
Further information on storage conditions:	Do not store below 0°C and above +30°C.

8 Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection:	Required when vapours/aerosols are generated.
Hand protection:	Rubber or plastic gloves.
Eye protection:	Safety goggles.
Skin and body protection:	Closed working clothes.
Preventive and hygiene measures:	Do not eat and drink at work. Wash hands and face after work.

9 Physical and Chemical Properties

Appearance

Form/physical state:	Aqueous suspension.
Colour:	Blue-green.
Odour:	Product-specific.

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Data relevant to safety

Method:

pH (original state):	Approx. 6	
pH at 10 g/l H ₂ O and 20° C:	Approx. 6,5	
Change in physical state:	> 100° C evaporation of water.	
Boiling point/-range:	Not applicable.	°C
Melting point/-range:	Not determined.	°C
Flash point:	Not applicable.	°C
Inflammability:	Not applicable.	
Ignition temperature:	Not applicable.	°C
Self-ignition:	The product is not self-igniting.	
Fire-promotive properties:	The product is not oxidizing.	
Explosion hazard:	The product is not explosion hazardous.	
Explosion limits:	Not applicable.	
Vapor pressure (at °C):	Not applicable.	hPa
Density (at 20°C):	Approx. 1,4	g/cm ³
Solubility in water (at 20°C):	Approx. 200	g/l

10 Stability and Reactivity

Conditions to avoid:	Temperatures above +30° C. Keep the product from drying up.
Materials to avoid:	Reacts with alkalis setting ammonia free.
Hazardous decomposition products:	No decomposition if correctly used.
Thermic decomposition products:	If larger quantities of the product are on fire, the formation of sulfuric acid gases, nitrous gases and ammonia is possible.
Further information:	No decomposition if correctly used. The product is stable under normal conditions.

11 Toxicological Information

Toxicological tests

Acute toxicity	Quantitative data on the toxicity of this product are not available. <u>Property that must be anticipated on the basis with comparable preparations:</u> LD50 (oral, rat): >10.000 mg/kg
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Further toxicological information

After inhalation of aerosols/vapours:	Slight irritations of the mucous membranes and coughing.
After skin contact:	Slight irritations.
After eye contact:	Slight irritations.
After swallowing:	We have no description of any toxic symptoms. <u>Property that must be anticipated on the basis of structure-effect considerations:</u> disturbed electrolyte balance.
After uptake of large quantities:	Disturbed electrolyte balance.

Further data

Further hazardous properties cannot be excluded.
The product should be handled with the care usual when dealing with chemicals.
No toxicological effects are to be expected when the product is handled and used with due care and attention.

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12 Ecological Information

Ecotoxic effects

Quantitative data on the ecological effect of this product are not available.

Biological effects: Toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Copper ions toxic for fish, algae, protozoa, and bacteria at concentrations below 1 mg/l.

Further ecologic data

The following applies to copper compounds:

Fish: C. auratus toxic 0,01 mg/l;
mussels: 0.55 mg/l lethal in 12 h.;
oysters: 0,1 mg/l toxic.

Do not allow to enter waters, waste water, sewerage, or soil.

13 Disposal Considerations

Product

Recommendation: Disposal of product rests in accordance with the official local disposal regulations.

According to european waste regulations:

Waste Code (EWC-No.): 061002

Waste Name: Wastes from the manufacture, formulation, supply and use of nitrogen chemicals, nitrogen chemical processes and fertilizer manufacture.
Wastes containing dangerous substances.

Contaminated packaging

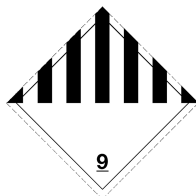
Recommendation: Disposal of contaminated packages in accordance with the local official disposal regulations.

Cleaners: Water.

Further information: In the UK disposal may be made to a licensed treatment/disposal site in accordance with the provisions of „The Environmental Protection Act 1990“.

14 Transport Information

HAZARD LABEL



UN-No.: 3082

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Surface transport:

(GGVS / GGVE) ADR / RID class: 9 Class.-Code: M 7 Packaging group III
Name of the material: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(LIQUID MIXTURE WITH COPPER SULFATE)

River transport

ADN / ADNR: Not examined.

Sea navigation transport:

IMDG / GGVS class: 9 EmS: --- Packaging group III
MFAG: ---
Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(LIQUID MIXTURE WITH COPPER SULFATE)

Air transport:

ICAO / IATA-Klasse: 9 Packaging group III
Correct technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(LIQUID MIXTURE WITH COPPER SULFATE)

Further information:

The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

15 Regulatory Information

Labelling according to EC Directives

Danger symbol and designation:



N – Dangerous for the environment

contains R-phrases: 51/53

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

S-phrases: 36
61

Wear suitable protective clothing.

Avoid release to the environment. Refer to special instructions/Safety data sheets.

National regulations Germany

Employment limitations: None

Interference regulations: None

Classification according to VbF: None

German Technical Regulations Air: None

Water pollution class (Germany): 2 - polluting material (self-classification)

Data sheet of the Chemical Professional Association: M050 Dealing with hazardous substances.

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16 Other information

Reasons for alteration:

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The information contained herein is based on the present state of our knowledge. It characterizes the product with the regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.