

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.09.2017

Version number 1

Revision: 15.09.2017

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

- Version number 2.0
- 1.1. Product identifier
- Trade name Kupfer(II)-oxid schwarz
- Article number: 1600_331002
- CAS Number:
1317-38-0
- EC number:
215-269-1
- Registration number 01-2119502447-44
- 1.2. Relevant determined uses of the substance or mixture; and uses advised against:
- Sector of Use
 - Industrial use
 - Additive for the manufacture of glass
 - Electroplating
 - Electro galvanizing
 - Absorbent
 - Paints and coatings
- Relevant determined uses of the substance/preparation:
 - Chemical product for serveral applications.
 - Industrial use
 - Absorbent
 - Adhesives
 - Catalyst
 - Fertiliser
 - Lubricant
- 1.3. Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
 - Lomborg GmbH
 - Buschhausener Straße 153, 46049 Oberhausen - Germany
 - Telefon: 0049-208-58004-0; Telefax: 0049-208-58004-38
 - E-Mail: info@lomborg.org
- Informing department: Product Safety Department
- 1.4. Emergency telephone number:
 - Emergency Call:
Poison Control Center Mainz - 24 hour emergency service - Tel: +49 (0) 6131/19240

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
 - Aquatic Acute 1 H400 (M=100) Very toxic to aquatic life.
 - Aquatic Chronic 1 H410 (M=1) Very toxic to aquatic life with long lasting effects.
- 2.2. Label elements
- Labelling according to Regulation (EC) No 1272/2008
 - The substance is classified and labelled according to the CLP regulation.

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· Hazard pictograms

GHS09

· Signal word Warning**· Hazard statements**

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3. Other hazards**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.1. Chemical characterisation: Substances****· CAS No. Designation:**

1317-38-0 copper oxide

· Identification number(s):**· EC number:** 215-269-1**SECTION 4: First aid measures****· 4.1. Description of first aid measures****· General information**

Personal protection for the First Aider.

Instantly remove any clothing soiled by the product.

· After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

· After skin contact

Wash immediately with soap and water.

If skin irritation continues, consult a doctor.

· After eye contact

Remove contact lenses, if present and easy to do. Rinse opened eye for several (at least 10) minutes under running water. Then consult doctor.

Use eye protection.

· After swallowing

Do not induce vomiting.

Call a doctor immediately.

· Information for doctor**· 4.2. Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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- **4.3. Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **5.2. Special hazards arising from the substance or mixture**
During heating or in case of fire dangerous gases / vapors.
By burning produce dense smoke.
metaloxide
Carbon monoxide (CO) and carbon dioxide (CO₂)
Do not inhale explosion and combustion gases.
The combustion produces a thick smoke.
- **5.3. Advice for firefighters**
- **Protective equipment:** Wear self contained breathing apparatus.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter drains.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures**
Wear protective equipment (see section 8).
Keep unprotected persons away.
Avoid breathing fume/ gas/ mist/ vapours/ aerosols.
Avoid breathing dusts.
- **6.2. Environmental precautions:**
Do not allow to enter into drains/waters or in the soil.
Local authorities should be advised if significant spillage cannot be contained.
Keep dirty washing water for appropriate disposal.
- **6.3. Methods and material for containment and cleaning up:**
Take up dust-free and set down dust-free.
Send for recovery or disposal in suitable containers.
Wash with plenty of water.
- **6.4. Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **Handling**
- **7.1. Precautions for safe handling**
Avoid contact with skin and eyes.
Avoid causing and depositing of dust.
Thorough dedusting.
Do not use empty container before they have been cleaned.
Contaminated clothing must be changed before entering dining rooms

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- **Information about protection against explosions and fires:** The product is not flammable
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Keep container tightly closed in a cool, well-ventilated place.
- **Information about storage in one common storage facility:** Keep away from incompatible materials.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3. Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1. Control parameters**
- **Components with critical values that require monitoring at the workplace:** Not required.
- **PNECs**

PNEC aqua (fresh water)	0.0078 mg/l (/)
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2. Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
Do not inhale dust / smoke / mist.
Ensure adequate ventilation at machinery where dust can be generated.
When using do not eat, drink or smoke.
Instantly remove any soiled and impregnated garments.
- **Protection of hands:** Not required.
- **Material of gloves** not applicable
- **Penetration time of glove material** Not applicable.
- **Eye protection:** Tightly sealed safety glasses (DIN EN 166)
- **Body protection:**
Protective work clothing.
Protective clothing should be selected in their place, depending on concentration and quantity of the hazardous substances. The chemical resistance of protective clothing should be clarified with their suppliers.

SECTION 9: Physical and chemical properties

- **9.1. Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Powder
Colour:	Black
Smell:	Odourless
Odour threshold:	Not applicable.
- **pH-value:** Not determined.

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· Change in condition	
Melting point/freezing point:	1326°C
Initial boiling point and boiling range:	Not determined.
· Flash point:	Not applicable.
· Inflammability (solid, gaseous)	Product is not inflammable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Self-inflammability:	Not determined.
· Explosive properties:	Product is not explosive.
· Critical values for explosion:	
Lower:	Not applicable
Upper:	Not applicable
· Oxidising properties	No information available.
· Steam pressure:	Not determined.
· Density at 20°C	6.315g/cm ³
· Settled apparent density	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water at 20°C:	0,000394g/l
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
· 9.2. Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1. Reactivity** The substance is stable under normal conditions of use.
- **10.2. Chemical stability** Stable under recommended storage conditions.
- **10.3. Possibility of hazardous reactions** No dangerous reactions known
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:**
 - Acids.
 - Oxidising agents.
 - Metals in powder form.
- **10.6. Hazardous decomposition products:**
 - In case of fire: see section 5
 - Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1. Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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· LD/LC50 values that are relevant for classification:

Oral	LD50.	>2,500 mg/kg (rat)
Dermal	LD50.	>2,000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **after inhalation:** irritating
- **Sensitisation:** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1. Toxicity
· Aquatic toxicity:

EC50 (48h)	0.0926 mg/l (Daphnia magna (großer Wasserfloh))
LC50 (96h)	0.81 mg/l (Cyprinus carpio)

- **12.2. Persistence and degradability** Not degradable.
- **Behaviour in environmental systems:**
- **12.3. Bioaccumulative potential** No bioaccumulation.
- **12.4. Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
 Water hazard class 1 (Assessment by list): slightly hazardous for water.
 The material is harmful for the environment.
 Very toxic for aquatic organisms
 Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- **12.5. Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6. Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1. Waste treatment methods**
- **Recommendation**
 Check material recycling.
 Must be specially treated under adherence to official regulations.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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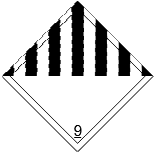

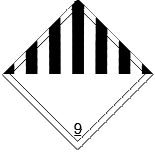

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- **Waste disposal key number:**
The waste code according to the Waste Catalogue Ordinance (AVV) must be determined by the waste producer, it depends on the type of use/ type of waste generation and may be different for a particular product.
- **European waste catalogue**
The appropriate code according to the European Waste Catalogue (EWC) should be used.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1. UN-Number · ADR, IMDG, IATA	UN3077
· 14.2. UN proper shipping name · ADR · IMDG · IATA	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper oxide) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper oxide), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper oxide)
· 14.3. Transport hazard class(es) · ADR	
 	
· Class · Label	9 Miscellaneous dangerous substances and articles. 9
· IMDG, IATA	
 	
· Class	9 Miscellaneous dangerous substances and articles.
· 14.4. Packing group · ADR, IMDG, IATA	III
· 14.5. Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Yes (P) Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6. Special precautions for user · Kemler Number:	Not applicable. 90

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· Stowage Category	A
· Stowage Code	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER OXIDE), 9, III

SECTION 15: Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
III	100.0

- **Water hazard class:** Water hazard class 1 (L): Slightly hazardous to water.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** Environment protection department.
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
RTECS - Registry of Toxic Effects of Chemical Substances
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

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*IATA: International Air Transport Association**P: Marine Pollutant**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**PNEC: Predicted No-Effect Concentration (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**· Sources This information is based on information from suppliers.**· * Data compared to the previous version altered. Changes Due to recent findings.*

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