

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

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

Trade name : Cu 99,95% powder OFHC 45-100 µm  
Material number : 031468UY0

Substance No. : CAS-No. : 7440-50-8  
Index-No. : 029-024-00-X  
EINECS-No. : 231-159-6

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

This information is not available.

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

Company : ECKART TLS GmbH  
PC-Straße 5  
06749 Bitterfeld-Wolfen  
Germany  
Telephone : +493493929590  
Telefax : +4934939295999  
E-mail address : [info.eckart.tls@altana.com](mailto:info.eckart.tls@altana.com)  
Responsible/issuing person

**1.4 Emergency telephone number****NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

**SECTION 2: Hazards identification****GHS Classification**

: Short-term (acute) aquatic hazard, Category 1, H400  
Long-term (chronic) aquatic hazard, Category 2, H411

**GHS-Labelling**

Symbol(s)

:



Signal word

: Warning

Hazard statements

: H400: Very toxic to aquatic life.  
H411: Toxic to aquatic life with long lasting effects.

Precautionary statements

: **Prevention:**  
P273 Avoid release to the environment.  
**Response:**  
P391 Collect spillage.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

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

Identification  
copper

CAS-No.  
7440-50-8

**Other hazards which do not result in classification**

Combustible Solids

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

**SECTION 3: Composition/information on ingredients**

Substance No. : CAS-No. : 7440-50-8  
Index-No. : 029-024-00-X  
EINECS-No. : 231-159-6

**Hazardous components**

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
copper	7440-50-8 231-159-6	Aquatic Acute;1;H400 Aquatic Chronic;2;H411	50 - 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

General advice : Move the victim to fresh air.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical  
advice.  
If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

This information is not available.

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

This information is not available.

---

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Suitable extinguishing media : Dry sand, Special powder against metal fire

Unsuitable extinguishing media : ABC powder, Carbon dioxide (CO<sub>2</sub>), Foam, Water

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Contact with water liberates extremely flammable gas (hydrogen).

Do not allow run-off from fire fighting to enter drains or water courses.

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

## **Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

---

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.  
Evacuate personnel to safe areas.  
Avoid dust formation.

#### **6.2 Environmental precautions**

General advice : The product should not be allowed to enter drains, water  
courses or the soil.  
Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

This information is not available.

#### **6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Use mechanical handling equipment.  
Do not use a vacuum cleaner.  
Keep in suitable, closed containers for disposal.

#### **6.4 Reference to other sections**

For personal protection see section 8.

---

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Advice on safe handling : Avoid creating dust. Routine housekeeping should be  
instituted to ensure that dusts do not accumulate on surfaces.  
Store away from heat.

For personal protection see section 8. Smoking, eating and  
drinking should be prohibited in the application area. Dispose  
of rinse water in accordance with local and national

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

regulations.

Advice on protection against fire and explosion : Use explosion-proof equipment. During processing, dust may form explosive mixture in air. Take measures to prevent the build up of electrostatic charge. When transferring from one container to another apply earthing measures and use conductive hose material.

Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : Wash hands before breaks and at the end of workday.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Use explosion-proof equipment. Store in original container. Keep away from sources of ignition - No smoking. Keep container closed when not in use.


Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Other data : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

Page 6 / 16	102000036904	A member of  <b>ALTANA</b>
-------------	--------------	---

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

This information is not available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Germany:**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
copper	7440-50-8	AGW (inhalable fraction)	1 mg/m <sup>3</sup>		DE TRGS 900

**8.2 Exposure controls****Personal protective equipment**

Eye protection : Face-shield  
: Tightly fitting safety goggles

**Hand protection**

Material : Leather  
Glove length : Long sleeve gloves  
Remarks : Leather gloves

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Anti-static and fire resistant protective clothing. DIN EN 11612; EN 533; EN 1149-1. Anti-static safety shoes.

: Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

Respiratory protection : Use suitable breathing protection if workplace concentration requires.  
Breathing apparatus with filter.  
P1 filter

**Environmental exposure controls**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
: Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Appearance : granular  
Colour : copper  
Odour : characteristic  
pH : substance/mixture is non-soluble (in water)  
Freezing point : No data available  
Boiling point/boiling range : No data available  
Flash point : No data available  
Bulk density : No data available  
Flammability (solid, gas) : Combustible Solids  
  
Auto-flammability : No data available  
Upper explosion limit : No data available  
Lower explosion limit : No data available  
Vapour pressure : No data available



Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

Density	: No data available
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available

**9.2 Other information**

No data available

---

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No decomposition if stored and applied as directed.

**10.2 Chemical stability**

No decomposition if stored and applied as directed.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**Materials to avoid : Acids  
Bases  
Oxidizing agents  
Water**10.6 Hazardous decomposition products**

Other information : No data available

---

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

No data available

**Toxicity to reproduction/fertility**

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

No data available

**Reprod.Tox./Development/Teratogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product**

No data available

---

**SECTION 12: Ecological information****12.1 Toxicity****Components:****copper (7440-50-8) :**

M-Factor : 1

**Ecotoxicology Assessment**

Short-term (acute) aquatic hazard : Very toxic to aquatic life.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

Long-term (chronic) aquatic hazard : Toxic to aquatic life with long lasting effects.

**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****Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life., Toxic to aquatic life with long lasting effects.

---

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

Contaminated packaging : chemical or used container.  
Send to a licensed waste management company.  
: Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

**SECTION 14: Transport information****14.1 UN number****ADR** : 3077**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : 3077**IATA** : 3077**14.2 Proper shipping name**

**ADR** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(Copper metal powder )

**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(,Copper metal powder )

**IATA** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(Copper metal powder)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

**14.3 Transport hazard class****ADR** : 9**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG** : 9**IATA** : 9**14.4 Packing group****ADR**

Packaging group : III

Classification Code : M7

Hazard Identification Number : 90

Labels : 9

Tunnel restriction code : (-)

**TDG**

Not dangerous goods

**CFR**

Not dangerous goods

**IMDG**

Packaging group : III

Labels : 9

EmS Code : F-A, S-F

**IATA**Packing instruction (cargo  
aircraft) : 956

Packing instruction : 956

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

(passenger aircraft)

Packing instruction (LQ) : Y956

Packaging group : III

Labels : 9

**14.5 Environmental hazards****IMDG** : Marine pollutant**ADR** : Environmentally hazardous**14.6 Special precautions for user****IMDG Code- segregation group:**

: IMDG Code segregation group 7 - Heavy metals and their salts

For single packagings ≤ 5L / 5 kg, or combination packagings containing inner packagings ≤ 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

---

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**Cu 99,95% powder OFHC 45-100 µm**

Version 1.0

Revision Date 25.10.2023

Print Date 27.11.2024

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

**15.2 Chemical safety assessment**

No data available

**SECTION 16: Other information****Full text of H-Statements**

H400 : Very toxic to aquatic life.  
H411 : Toxic to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.