

KME Germany GmbH & Co. KG, KME Brass Germany GmbH, Fricke GmbH  
KME Brass France SAS, KME Brass Italy S.r.l.  
KME Spain SA., KME Ibertubos SA  
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**KME-product:** semi finished products from copper

*Revised at: 16.02.2016*

## Information sheet for articles<sup>1</sup>

### 1. Identification of the article and of the supplier

**Application/use of the article:**

Articles from copper and copper alloy like plumbing tubes (blank or coated), rods, plates, sheets, coins and other semi-finished products in massive form

**Further information contact / supplier information:**

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### Remarks

Semi-finished products from copper and copper alloys are articles according to Regulation (EC) No. 1907/2006 (REACH Regulation). For articles it is not mandatory by law to issue a safety data sheet. To provide information to our customers this voluntarily information sheet was compiled, but it is not subject to the formal requirements of the REACH Regulation.

### 2. Hazard identification

When supplied in solid form the articles from copper and copper alloys are nonhazardous. If they are subsequently processed in any way which might produce airborne dust or fumes, for instance by dry grinding, abrading, electro discharge machining, melting or welding (the material itself) then an inhalation hazard could arise.

General handling, stamping, forming and most machining operations are nonhazardous. Heat treatment in air up to about 400 °C is non-hazardous but higher temperatures may give rise to loss of oxide, which could cause hazardous inhalation. This can be avoided by treatment in inert atmosphere.

<sup>1</sup> We confirm that the information involved in the drawing up of this document has been checked to the best of our knowledge for completeness, correctness and current relevance. We shall inform our customers about mistakes which transpire to exist in information included in this declaration as well as about amendments about which we become aware prior to a delivery. We declare our agreement with the fact that our information is to be used by our customers along the supply chain. We provide a guarantee for any damages which can be proved to ensue from intentionally incorrect or incomplete documentation.

### 3. Composition / information on ingredients

**Description:** Pure Copper-metal in compact form

**Material codes: copper**

| KME material<br>Trade name | EN<br>Material code<br>(CEN/TS 13388:2013) | EN<br>Material number<br>(CEN/TS 13388:2013) | ASTM<br>UNS-number   |
|----------------------------|--|--|----------------------|
|                            | Cu-ETP1                                    | CW 003 A                                     | C 11000              |
|                            | Cu-ETP                                     | CW 004 A                                     | C 11000              |
|                            | Cu-OFE                                     | CW 009 A                                     | C 10100              |
|                            | Cu-PHC                                     | CW 020 A                                     | C 10300 <sup>~</sup> |
|                            | Cu-HCP                                     | CW 021 A                                     | C 10300 <sup>~</sup> |
|                            | Cu-PHCE                                    | CW 022 A                                     | C 10300 <sup>~</sup> |
|                            | Cu-DLP                                     | CW 023 A                                     | C 12000              |
|                            | Cu-DHP                                     | CW 024 A                                     | C 12200              |
|                            | Cu-DXP                                     | CR 025 A                                     | C 12220              |
|                            | Cu-HCP*                                    | CW 621 A*                                    | C 10300 <sup>~</sup> |
| TECU <sup>®</sup> -Classic |  |  |                      |
| TECU <sup>®</sup> -Oxid    |  |  |                      |
| TECU <sup>®</sup> -Patina  |  |  |                      |
| SANCO <sup>®</sup>         |  |  |                      |
| WICU <sup>®</sup>          |  |  |                      |
| Cuprotherm <sup>®</sup>    |  |  |                      |

**\*similar material**

The classifications mentioned below reflect the classification of the responding pure substance and are for information only. Copper alloys are special preparations according to Regulation (EC) 1907/2006 (REACH).

| Substance name | CAS-No.:  | EINECS    | RTECS      | Weight % |
|----------------|-----------|-----------|------------|----------|
| copper         | 7440-50-8 | 231-159-6 | GL 5325000 | > 99,9   |

### 4. First aid -measures

**General information:** There is no acute risk associated and no special measures required.

| Exposure     | Measures  |
|--------------|---|
| Inhalation   | Ensure supply of fresh air. In the event of symptoms refer to medical treatment. In practice any exposure can only arise from operations such as grinding, abrading, electro discharge machining, welding or melting and is likely to be at low levels which will not cause immediate symptoms. |
| Skin contact | Normally no skin irritation.  |
| Eye contact  | Rinse thoroughly with plenty of water and seek medical advice. Use normal industrial protection to protect against foreign bodies entering the eyes.  |
| Ingestion    | In the event of symptoms refer to medical treatment. Use normal industrial hygiene.   |

### 5. Fire fighting measures

|                                      |  |
|--------------------------------------|--|
| <b>suitable extinguishing agents</b> | Use fire extinguishing methods suitable to surrounding conditions. |
| <b>Protective equipment</b>          | No special measures required                                       |

## 6. Accidental release measures

|                                 |                              |
|---------------------------------|------------------------------|
| <b>Personal Protection</b>      | Not required, not applicable |
| <b>Environmental protection</b> | Not required, not applicable |

## 7. Handling and storage

| Handling and storage                                 | Measure   |
|--|---|
| <b>Protection of personal health and environment</b> | Control are only applicable to any process which might produce air-borne dust or fumes, which are subject to Health and Safety Executive Maximum Exposure as shown in the table 8.1 |
| <b>Storage, Co-storage, maximum storage</b>          | No special requirements. Look for surrounding conditions.   |

## 8. Exposure controls and personal protections

### Limitation and control of the exposure at the working place

If breathable dust or smoke occurs by machining, the exposition to workers should be controlled with a exhaust filter system to meet the limit values. As an additional measure personal protection as a filter mask or an independent breathing helmet may be used.

### Occupational Exposure Limit Values for possible hazards during processing

Link to GESTIS International Limit Values: [http://bgia-online.hvbg.de/LIMITVALUE/WebForm\\_gw.aspx](http://bgia-online.hvbg.de/LIMITVALUE/WebForm_gw.aspx)

| Personal protective equipment | Recommendation   |
|-------------------------------|--|
| <b>Respiratory</b>            | Use an industrial filter mask (type P2) when work-place limits are exceeded. |
| <b>Hands</b>                  | Protective gloves are recommended, depending on the handling.                |
| <b>Eyes</b>                   | Eye protection is recommended, depending on the processing.                  |
| <b>Body</b>                   | Wear suitable protective clothing, depending on the processing.              |

## 9. Physical and chemical properties

| Parameter                            | description   |
|--------------------------------------|---|
| <b>Colour</b>                        | copper red  |
| <b>State of aggregation</b>          | solid   |
| <b>Density</b>                       | 8,96 g/cm <sup>3</sup> (Lit.)   |
| <b>Solubility in water</b>           | insoluble   |
| <b>Odour</b>                         | odourless   |
| <b>Melting point</b>                 | 1083 °C (Lit.)  |
| <b>Boiling point / boiling range</b> | undetermined  |
| <b>Flash point</b>                   | Not applicable  |
| <b>Ignition (solid, gaseous)</b>     | Not applicable  |
| <b>Explosion occurrence</b>          | - No danger in solid form<br>- In case of melted metal risk of explosion by contact with water. |

## 10. Stability and reactivity

**Conditions to avoid:** No decomposition if used to specification.

With contact to mercury, ammonia, acetylene, chlorine-gas and various acids may be incompatibility. There will be a corrode reaction.

## 11. Toxicology information

**General information:**

When used and handled according to specifications, the article does not have any harmful effects to our experience.

**On skin:** No irritant effect.

**On eye:** No irritating effect.

**Sensitization:** No sensitizing effects known.

## 12. Ecological information

**General notes**

Semi-finished articles from copper and copper-alloys are practically insoluble in water.

**Potential of bioaccumulation**

Copper is a basic essential element, it will not be accumulated, but by some living stored for later use.

## 13. Disposal considerations / Recycling

KME confirm that the articles from copper and copper alloys could and should be recycled by end of life in accordance with Annex II to Directive 75/422/EEC for the recovery operation R4 (recycling / reclamation of metals).

Classification according to the Waste Catalogue Ordinance of 07/24/2002.

KME is authorized to receive and recover waste from copper and copper alloys each broken down by source:

| Origin of the waste in according with EWC                      | EWC-Waste Code | Description             |
|--|----------------|-------------------------|
| Waste from mechanical design processes                         | 12 01 03       | Non-ferrous metal chips |
| disassemble of old cars  | 16 01 18       | Non-ferrous metal       |
| Metals (including alloys)                                      | 17 04 01       | copper, bronze, brass   |
| Waste from shredding of metal-containing waste                 | 19 10 02       | Non-ferrous metal waste |
| Wastes from the mechanical processing (e.g. sorting, crushing) | 19 12 02       | Non-ferrous metal       |

**EU-transboundary shipment of waste Directive**

| classification  | Waste code | Description  |
|---|------------|--------------|
| B1 metals and metal containing waste, in massive form | B1010      | Copper scrap |

Contact KME or local metal dealer for recycling information.

## 14. Transport information

There is no special risk of carrying copper alloys in solid form, either as a primary product or as scrap. EEC hazard labelling is not required.

Apply suitable measures concerning load securing in due consideration to dimension and mass of the articles.

## 15. Regulatory information

### Labelling in accordance to the EC-regulations and SVHC candidate list

Semi-finished articles from copper and copper-alloy are not a substance or mixtures according to Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures (GHS/CLP regulation).

The articles and packaging do not contain any of the particularly alarming substances (SVHC) mentioned in the candidate list in concentrations of more than 0.1% (w/w), at the time of the revision date of this information sheet.

(SVHC-candidate list updated by ECHA)

Link to see the current candidate list: [http://echa.europa.eu/chem\\_data/candidate\\_list\\_en.asp](http://echa.europa.eu/chem_data/candidate_list_en.asp)

The products from copper and copper-alloy (with tinned or uncoated surface) have a chemical composition in accordance with the below listed Directives of the European Parliament and of the Council and Council/Commission Decisions and mentioned regulations:

| Item                  | Regulation   |
|-----------------------|--|
| ELV                   | DIRECTIVE 2000/53/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 September 2000 on end-of life vehicles (so-called ELV) according amendment of Annex II (2008/689/EG)  |
| GADSL                 | VDA 232-101 Global Automotive Declarable Substance List (GADSL)  |
| RoHS                  | DIRECTIVE 2011/65/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 08 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (so-called RoHS 2)<br><br>China-RoHS SJ/T 11363-2006)  |
| DecaBDE               | DIRECTIVE 2005/717/EG of 1st July 2008 Flame retardent DecaBDE in electrical and electronic appliances.  |
| WEEE                  | <b>Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)</b>   |
| PFOS                  | Directive 2003/11/EG (Pentabromdiphenylether, Octabromdiphenylether) and 2006/122 EG (PFOS) of the EUROPEAN PARLIAMENT AND OF THE COUNCIL to change 76/769/EG for the use of dangerous substances and dangerous products.<br>EU Commission Regulation No. 519/212 to change annex I of No. 850/2004<br>The products are free from PAH. |
| Ozone-Layer           | Regulation (EC)1005/2009: Substances that Deplete the Ozone Layer  |
| - Cr VI<br>- asbestos | The products are free from hexavalent chromium (CrVI)<br>The products are free from asbestos.  |
| - Packaging material  | Directive 94/62/EG (packaging)   |

## 16. Other information

The given information is based on the present knowledge and our experiences. They are given for a safe and proper use of our articles. These given data don't have the meaning of insured properties. The information in this information sheet is made by our best knowledge and our conscience.