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

Revised at: June 18th, 2015

Information sheet for articles[1]

1. Identification of the article and of the supplier

Application / use of the article:
Articles from copper alloy like plates, sheets and other semi-finished products in massive form

Further information contact / supplier information:

Italy

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France

Philippe Marchal EHS Country Manager France Tel: +33 2 33 24 94 68 Mail: Philippe.Marchal@kme.com **Emergency:** +33 2 33 24 94 68	**KME France SAS** **KME Brass France SAS** **(Headquarters)** 11 bis, rue de l'Hôtel de Ville 92411 Courbevoie France Tel. +33-(0)1 47 89 68 68 Fax +33-(0)1 46 67 12 12	**KME Brass France SAS** **(Boisthorel)** Tel. +33-(0)2 33 24 94 00 Fax +33-(0)2 33 24 94 99 **KME France SAS (Givet)** Tel. +33-(0)3 24 42 64 00 Fax +33-(0)3 24 42 **KME France SAS (Niederbrück)** Tel. +33-(0)3 89 38 55 10 Fax +33-(0)3 89 38 89 77 **KME France SAS (Besançon)** Tel. +33-(0)3 81 88 93 30 Fax +33-(0)3 81 88 93 39

[1] 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.

Spain

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Germany

Frank Otten EHS Country Manager Germany Tel: +49 (0)541 321 1509 Mail: Frank.Otten@kme.com **Emergency:** +49 (0)541 321 1509	**KME Germany GmbH & Co. KG** Klosterstrasse 29 49074 Osnabrück GERMANY Tel. +49-(0)5 41-3 21-0 Fax +49-(0)5 41-3 21-13 66 **Fricke GmbH** Eichendorffweg 10 48268 Greven GERMANY Phone +49-(0) 25 75-3 09-0 Fax +49-(0) 25 75-3 09-25	**KME Brass Germany GmbH** Miraustrasse 10-14 13509 Berlin GERMANY Tel. + 49-(0) 30-40 97-0 Fax + 49-(0) 30-40 97-3 36

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 zinc and zinc 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 ℃ 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.

3. Composition / information on ingredients

Description: Zinc-alloy (metal in compact form)

Material codes: zinc alloy

KME material Trade name	EN Material code (CEN/TS 13388:2013)	EN Material number (CEN/TS 13388:2013)	ASTM UNS-number
	ZnCu0,1Sn0,1	-	-

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

Classified alloy components

Number	Name of component	Classification CLP / EU	Content (w/w) / remark

Additional alloy components, respective to individual alloy

Number	Name of component	Classification	Content (w/w) / remark
CAS: 7440-66-6 EINECS: 231-175-3	Zinc	-	Min 99,8 %
CAS: 7440-50-8 EINECS: 231-159-6	Copper	-	Max 0,1 %
CAS: 7440-31-5 EINECS: 231-141-8	Tin	-	Max 0,1 %

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

suitable extinguishing agents	Use fire extinguishing methods suitable to surrounding conditions.
Protective equipment	No special measures required

6. Accidental release measures

Personal Protection	Not required, not applicable
Environmental protection	Not required, not applicable

7. Handling and storage

Handling

Protection of personal health and environment	Control are only applicable to any process which might produce airborne dust or fumes, which are subject to Health and Safety Executive Maximum Exposure as shown in the table 8.1

Storage

Safety of persons and things	No special requirements.
Co-storage / maximum storage	No special requirements.

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

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

9. Physical and chemical properties

Parameter	description
Colour	silver grey
State of aggregation	solid
Density	8,92 g/cm3 (Lit.)
Solubility in water	insoluble
Odour	odourless
Melting point	1100 - 1150 ℃ (Lit.)
Boiling point / boiling range	undetermined
Flash point	Not applicable
Ignition (solid, gaseous)	Not applicable
Explosion occurrence	- No danger in solid form - 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 zinc and zinc-alloys are practically insoluble in water.

Potential of bioaccumulation
Zinc 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 zinc and zinc 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, zinc scrap

Contact KME or local metal dealer for recycling information.

14. Transport information

There is no special risk of carrying zinc 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 zinc and zinc-alloy are not 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 data 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*

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 Jun2 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (so-called RoHS II) China-RoHS SJ/T 11363-2006)
DecaBDE	DIRECTIVE 2005/717/EG of 1st July 2008 Flame retardent DecaBDE in electrical and electronic appliances.
WEEE	**Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)**
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. The products are free from PAH.

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.