

1 Identification

- **1.1 Product identifier**
 - Trade name: **Wieland K88**
 - **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
 - Application of the substance / the preparation: Semi-finished product
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- **1.3 Details of the supplier of the safety data sheet**
 - Manufacturer/Supplier:
Wieland-Werke AG
Graf-Arco-Straße 36
89079 Ulm (Germany)
Tel.: +49 (0)731/944-0
Fax: +49 (0)731/944-2799
 - Information department:
Department testing laboratories
michael.ebner@wieland.de
 - **1.4 Emergency telephone number:**
Factory security offices
Phone: +49 (0) 731-944-3706

2 Hazard(s) identification

- **2.1 Classification of the substance or mixture**
 - Classification according to Regulation (EC) No 1272/2008 (CLP-Regulation):
For products there is no obligation to classify acc. to CLP -Regulation.
The product is not classified according to the CLP regulation.
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- **2.2 Label elements**
 - Labelling according to Regulation (EC) No 1272/2008: Void
 - Hazard pictograms: Void
 - Signal word: Void
 - Hazard-determining components of labeling: Void
 - Hazard statements: Void
 - **2.3 Other hazards**
Semi-finished products from copper or copper-alloys, as offered for sale as manufactured present no health hazard to man or for the aquatic environment.
 - Results of PBT and vPvB assessment
 - PBT: Not applicable to metals
 - vPvB: Not applicable to metals.

3 Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**
- Description: Metal in compact form.
- UNS-number: C18080
- Information:
The classifications mentioned below reflect the respective pure substance and are for information only.
Copper alloys are special preparations according to Regulation (EC) 1907/2006 (REACH Regulation).
The classification of a pure substance is not applicable to its use as element of a copper alloy.

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· Components:

| | | |
|--|----------|------------|
| CAS: 7440-50-8 EINECS: 231-159-6 RTECS: GL 5325000 | copper | balance% |
| CAS: 7440-47-3 EINECS: 231-157-5 RTECS: GB 4200000 | chromium | 0.20-0.7% |
| CAS: 7440-22-4 EINECS: 231-131-3 | silver | 0.01-0.30% |
| CAS: 7439-89-6 EINECS: 231-096-4 RTECS: NO 4565500 | iron | 0.02-0.20% |
| CAS: 7440-32-6 EINECS: 231-142-3 RTECS: XR 1700000 | titanium | 0.01-0.15% |
| CAS: 7440-21-3 EINECS: 231-130-8 RTECS: VW 0400000 | silicon | 0.01-0.1% |

4 First-aid measures

- **4.1 Description of first aid measures**

- General information:

No special measures required.

First Aid information refer to any dust which is generated.

- After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.

- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: Rinse out mouth and then drink plenty of water.

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

No further relevant information available.

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

No further relevant information available.

5 Fire-fighting measures

- **5.1 Extinguishing media**

- Suitable extinguishing agents:

Non-flammable. Use fire fighting measures that suit the environment.

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

No further relevant information available.

- **5.3 Advice for firefighters**

· Protective equipment: No special measures required.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures:** Not required.

- **6.2 Environmental precautions:** Not required

- **6.3 Methods and material for containment and cleaning up:**

Dispose of the collected material according to regulations.

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- **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 disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling:** No special measures required.
- Information about protection against explosions and fires: No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Further information about storage conditions: None.
- **7.3 Specific end use(s):** No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- **8.1 Control parameters**
- Components with limit values that require monitoring at the workplace:
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

7440-50-8 copper

| | |
|-----|--|
| PEL | Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume |
| REL | Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume |
| TLV | Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu |

- Additional information: The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- Personal protective equipment:
- General protective and hygienic measures:
Wash hands before breaks and at the end of work.
Do not inhale dust / smoke / mist.
- Breathing equipment: Use a suitable industrial gas mask when work-place-limits are exceeded.
- Protection of hands:
Protective gloves are recommended, depending upon how the semis are further processed.
- Eye protection:
Protective goggles are recommended, depending upon how the semis are further processed.
- Body protection:
Wear suitable protective clothing, depending upon how the semis are further processed.

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- General Information
- Appearance:
- Form: Solid
- Color: copper red

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- | | |
|------------------------------------|---|
| · Odor: | Odorless |
| · Odor threshold: | Not determined. |
| · Change in condition | |
| Melting point/Melting range: | 1084-1099 °C (1983-2010 °F) (Lit.) |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Density at 20 °C (68 °F): | 8.92 g/cm ³ (74.437 lbs/g al) (Lit.) |
| · Solubility in / Miscibility with | |
| Water: | Not soluble. |
| · 9.2 Other information | No further relevant information available. |

10 Stability and reactivity

- **10.1 Reactivity:** Not applicable.
- **10.2 Chemical stability:** Not applicable.
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **11.1 Information on toxicological effects**
- Acute toxicity: Based on available data, the classification criteria are not met.
- Primary irritant effect:
 - on the skin: Based on available data, the classification criteria are not met.
 - on the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- Additional toxicological information:
When used and handled according to specifications, the article does not have any harmful effects to our experience and the information provided to us.
- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

7440-47-3 | chromium

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- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- **12.1 Toxicity**
- Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.

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- Additional ecological information
- General notes:
For semi-finished products in copper or copper-alloys no information regarding ecology is suitable, as it is not soluble in water.
- **12.5 Results of PBT and vPvB assessment**
- PBT: Not applicable to metals.
- vPvB: Not applicable to metals.
- **12.6 Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**
- Recommendation: Contact manufacturer for recycling information.

14 Transport information

- | | |
|--|-----------------|
| · 14.1 UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · DOT, ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user: | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Sara

- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

7440-50-8 copper

7440-47-3 chromium

7440-22-4 silver

- TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65

- Chemicals known to cause cancer:

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

| | | |
|-----------|----------|---|
| 7440-50-8 | copper | D |
| 7440-47-3 | chromium | D |
| 7440-22-4 | silver | D |

· TLV (Threshold Limit Value established by ACGIH)

| | | |
|-----------|----------|----|
| 7440-47-3 | chromium | A4 |
|-----------|----------|----|

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment void.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific article features and shall not establish a legally valid contractual relationship

· Department issuing SDS: Department testing laboratories

· Contact:

Dr. Michael Ebner

Phone (+)49 (0)731/944-3706

· Date of preparation / last revision 09/01/2017 / 3

· * Data compared to the previous version altered.