

1 Identification

- **1.1 Product identifier**
 - Trade name: **Wieland KD5**
 - **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
-
- **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.
-
- **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: -
- 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.
- Components:
Mentioned percentages are references values.

(Contd. on page 2)

US

Trade name: **Wieland KD5**

(Contd. of page 1)

CAS: 7440-50-8 EINECS: 231-159-6 RTECS: GL 5325000	copper	balance%
CAS: 7440-22-4 EINECS: 231-131-3	silver	3%
CAS: 7440-67-7 EINECS: 231-176-9 RTECS: ZH 7070000	zirconium	0.5%

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.
- **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.

(Contd. on page 3)

Trade name: **Wieland KD5**

(Contd. of page 2)

- **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:

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

7440-22-4 silver

PEL	Long-term value: 0.01 mg/m ³
REL	Long-term value: 0.01 mg/m ³
TLV	Long-term value: 0.1 mg/m ³ metal: dust and fume

- 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
Odor:	Odorless
Odor threshold:	Not determined.
- Change in condition

Melting point/Melting range:	1013-1058 °C (1855-1936 °F) (Lit.)
Boiling point/Boiling range:	Undetermined.

(Contd. on page 4)

Trade name: **Wieland KD5**

(Contd. of page 3)

- | | |
|---|---|
| · Flash point: | Not applicable. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Density at 20 °C (68 °F): | 9.01 g/cm ³ (75.188 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) |
| None of the ingredients is listed. |

- | |
|-------------------------------------|
| · 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.
- 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.

(Contd. on page 5)

Trade name: **Wieland KD5**

(Contd. of page 4)

- **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

7440-22-4 silver

- TSCA (Toxic Substances Control Act):

7440-50-8 copper

7440-22-4 silver

- Proposition 65

- Chemicals known to cause cancer:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

(Contd. on page 6)

Trade name: Wieland KD5

(Contd. of page 5)

· 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
7440-22-4	silver	D

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· 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 09/04/2017 / 1

· * Data compared to the previous version altered.