

\* **SECTION 1: Identification of the article and of the company:**

- **1.1 Product identifier**
- Trade name: **Wieland-G91**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- Application of the article: 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
- Further information obtainable from:  
Health & Safety, Environment, Management Systems  
[stefan.priggemeyer@wieland.com](mailto:stefan.priggemeyer@wieland.com)
- **1.4 Information in case of emergency:**  
Factory security offices  
Phone: +49 (0) 731-944-2794 (Monday - Friday from 9 a.m. to 4 p.m.)
- Remarks for information sheet:  
Semi-finished products from copper and copper-alloy are articles according to Regulation (EC) No. 1907/2006 (REACH Regulation).  
For articles there is no legal obligation to issue a safety data sheet. However, to be able to provide information typically included in a safety data sheet also for articles, the present information sheet for articles has been worked out.  
We expressly point out that the information sheet for articles is a voluntarily issued information sheet which is not subject to the formal requirements of the REACH Regulation.

\* **SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008 (CLP-Regulation):  
Semi-finished products do not fall within the scope of the CLP-Regulation and therefore there are not classified!

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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 labelling: Void
- Hazard statements: Void
- **2.3 Other hazards**
- Results of PBT and vPvB assessment
- PBT: Not applicable to metals
- vPvB: Not applicable to metals.

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

- **3.2 Chemical characterisation: Mixtures**
- Description: Metal in compact form.
- Material code (DIN CEN/TS 13388:2015-08): CuSn11Pb2-C
- Material number (DIN CEN/TS 13388:2015-08): CC482K

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- UNS-number: -
- Information:  
The classifications listed below reflect the classification of the relevant alloying constituents and are only for information.

· Alloy components:

|                                     |  |            |
|-------------------------------------|--|------------|
| CAS: 7440-50-8<br>EINECS: 231-159-6 | copper   | 83.5-87.0% |
| CAS: 7440-31-5<br>EINECS: 231-141-8 | tin  | 10.5-12.5% |
| CAS: 7439-92-1<br>EINECS: 231-100-4 | lead<br>⚠ Repr. 1A, H360FD-H362                                  | 0.7-2.5%   |
| CAS: 7440-02-0<br>EINECS: 231-111-4 | nickel<br>⚠ Carc. 2, H351; STOT RE 1, H372; ⚠ Skin Sens. 1, H317 | 0-2.0%     |

· SVHC

|           |      |
|-----------|------|
| 7439-92-1 | lead |
|-----------|------|

### SECTION 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.

The mixture in solid form does not pose any significant health hazard. However, melting or activities which produce metal dust, smoke or fumes can cause that metal dust enter the body in harmful amounts.

· 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.

### SECTION 5: Firefighting 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.

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- **5.3 Advice for firefighters:**
- Protective equipment: No special measures required.

### SECTION 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:**  
Collect the material and if necessary dispose it as waste according to section 13.
- **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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:** No special measures required.
- Information about fire - and explosion protection: 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: Store in dry conditions.
- **7.3 Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- Additional information to national classifications:  
TRGS 905 (national classification Germany)  
7439-92-1 lead metal (bioavailable): Toxic to reproduction (RF2); (RD1A).
- Additional information about design of technical facilities: No further data; see item 7.
- **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace:

|                         |   |
|-------------------------|---|
| <b>7440-31-5 tin</b>    |   |
| MAK (Germany)           | vgl. Abschn. IIb  |
| <b>7439-92-1 lead</b>   |   |
| MAK (Germany)           | vgl. Abschn. XII  |
| BOELV (EU)              | Long-term value: 0.15 mg/m <sup>3</sup><br>as Pb                    |
| <b>7440-02-0 nickel</b> |   |
| AGW (Germany)           | Long-term value: 0.006 A mg/m <sup>3</sup><br>8(II); AGS, 10, Sh, Y |

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· Ingredients with biological limit values:

**7439-92-1 lead**

|               |   |
|---------------|---|
| BGW (Germany) | 300 µg/l<br>Untersuchungsmaterial: Vollblut<br>Probennahmezeitpunkt: keine Beschränkung<br>Parameter: Blei Frauen < 45 J. |
|               | 400 µg/l<br>Untersuchungsmaterial: Vollblut<br>Probennahmezeitpunkt: keine Beschränkung<br>Parameter: Blei                |

· Additional Occupational Exposure Limit Values for possible hazards during processing:

**general dust limit (A - alveolar fraction, E - respirable fraction)**

AGW (Germany) | (A) 3 (E)10 mg/m<sup>3</sup>

· Additional information:

The lists valid during the making were used as basis.  
For the abbreviations, please refer to TRGS 900.

**· 8.2 Exposure controls**

· Personal protective equipment:

· General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Do not inhale dust / smoke / mist.

· Respiratory protection:

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 (material of gloves: neoprene or leather).

· Eye protection:

Protective goggles are recommended, depending upon how the semis are further processed (tightly sealed goggles - DIN EN 166).

· Body protection:

Wear suitable protective clothing, depending upon how the semis are further processed

**SECTION 9: Physical and chemical properties**

**· 9.1 Information on basic physical and chemical properties**

· General Information

· Appearance:

|                    |                 |
|--------------------|-----------------|
| Form:              | Solid           |
| Colour:            | copper red      |
| · Odour:           | Odourless       |
| · Odour threshold: | Not determined. |

· Change in condition

|  |                    |
|--|--------------------|
| Melting point/freezing point:            | 830-1000 °C (Lit.) |
| Initial boiling point and boiling range: | Undetermined.      |

· Flash point:

Not applicable.

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|   |   |
|---|---|
| · Explosive properties:                   | Product does not present an explosion hazard. |
| · Density at 20 °C:                       | 9 g/cm <sup>3</sup> (Lit.)                    |
| · Solubility in / Miscibility with water: | Not soluble.                                  |
| · <b>9.2 Other information</b>            | No further relevant information available.    |

### SECTION 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.

### SECTION 11: Toxicological information

- General information:  
The solid product does not pose a health hazard if handled properly.
- Effect on the skin: No effects.
- Effect on eyes: No effects.
- Sensitization: Due to the nickel content avoid direct and prolonged skin contact.

### SECTION 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:  
Semi-finished articles from copper and copper-alloy are 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.

### SECTION 13: Disposal considerations

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

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