1 Identification

- **1.1 Product identifier**
  - Trade name: **Wieland G10**

- **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 enviroment.
  - 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.

(Contd. on page 2)
### 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 contaminated material as waste according to item 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.
7 Handling and storage

· 7.1 Precautions for safe handling:
  No special measures required.
  Open and handle receptacle with care.
  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:

<table>
<thead>
<tr>
<th>7440-50-8 copper</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
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<tr>
<td>REL</td>
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<tr>
<td>TLV</td>
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</table>

<table>
<thead>
<tr>
<th>7440-31-5 tin</th>
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<tbody>
<tr>
<td>PEL</td>
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<td>REL</td>
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<td>TLV</td>
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<table>
<thead>
<tr>
<th>7440-02-0 nickel</th>
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</thead>
<tbody>
<tr>
<td>PEL</td>
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<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>7439-92-1 lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>
Trade name: Wieland G10

- Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>7439-92-1 lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI 30 µg/100 ml</td>
</tr>
<tr>
<td>Medium: blood</td>
</tr>
<tr>
<td>Time: not critical</td>
</tr>
<tr>
<td>Parameter: Lead</td>
</tr>
<tr>
<td>10 µg/100 ml</td>
</tr>
<tr>
<td>Medium: blood</td>
</tr>
<tr>
<td>Time: not critical</td>
</tr>
<tr>
<td>Parameter: Lead (women of child bearing potential)</td>
</tr>
</tbody>
</table>

- 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:
  - Keep away from foodstuffs, beverages and feed.
  - Immediately remove all soiled and contaminated clothing.
  - Wash hands before breaks and at the end of work.
  - Store protective clothing separately.
  - 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: 840-1020 °C (1544-1868 °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): 8.8 g/cm³ (73.436 lbs/gal) (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.
Trade name: Wieland G10

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)
  - 7440-02-0 nickel 2B
  - 7439-92-1 lead 2B

- NTP (National Toxicology Program)
  - 7440-02-0 nickel R
  - 7439-92-1 lead R

- 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.
- 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

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>14.1 UN-Number</strong></td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td>Void</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>DOT, ADR, ADN, IMDG, IATA</td>
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<td><strong>14.3 Transport hazard class(es)</strong></td>
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<tr>
<td><strong>14.4 Packing group</strong></td>
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<td>Void</td>
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<tr>
<td><strong>14.5 Environmental hazards:</strong></td>
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<td></td>
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<tr>
<td></td>
<td>Marine pollutant:</td>
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</tr>
<tr>
<td><strong>14.6 Special precautions for user:</strong></td>
<td></td>
<td>Not applicable.</td>
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<tr>
<td><strong>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</strong></td>
<td></td>
<td>Not applicable.</td>
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</table>

# 15 Regulatory information

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<tbody>
<tr>
<td><strong>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</strong></td>
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<tr>
<td><strong>Sara</strong></td>
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<tr>
<td></td>
<td>Section 355 (extremely hazardous substances):</td>
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<tr>
<td></td>
<td>None of the ingredients is listed.</td>
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<tr>
<td></td>
<td>Section 313 (Specific toxic chemical listings):</td>
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<td>7440-50-8 copper</td>
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<td>7440-02-0 nickel</td>
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<td></td>
<td>7439-92-1 lead</td>
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<tr>
<td><strong>TSCA (Toxic Substances Control Act):</strong></td>
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<td></td>
<td>All ingredients are listed.</td>
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<tr>
<td><strong>Proposition 65</strong></td>
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<td>Chemicals known to cause cancer:</td>
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<td></td>
<td>7440-02-0 nickel</td>
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<td></td>
<td>7439-92-1 lead</td>
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<td></td>
<td>Chemicals known to cause reproductive toxicity for females:</td>
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<tr>
<td></td>
<td>7439-92-1 lead</td>
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<td></td>
<td>Chemicals known to cause reproductive toxicity for males:</td>
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<td></td>
<td>7439-92-1 lead</td>
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<td>Chemicals known to cause developmental toxicity:</td>
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<td>7439-92-1 lead</td>
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<td><strong>Cancerogenity categories</strong></td>
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<tr>
<td></td>
<td>EPA (Environmental Protection Agency)</td>
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<td>7439-92-1 lead</td>
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<tr>
<td><strong>TLV (Threshold Limit Value established by ACGIH)</strong></td>
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<td></td>
<td>7440-02-0 nickel</td>
<td>A5</td>
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**Trade name:** Wieland G10

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Description</th>
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<tbody>
<tr>
<td>7439-92-1</td>
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<td>· NIOSH-Ca (National Institute for Occupational Safety and Health)</td>
</tr>
<tr>
<td>7440-02-0</td>
<td>nickel</td>
<td>· Chemical safety assessment void.</td>
</tr>
</tbody>
</table>

**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 08/23/2017 / 6
- * Data compared to the previous version altered.