1 Identification

1.1 Product identifier
- Trade name: Wieland G96

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):
  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.
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.
    - 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.
  - 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

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL Long-term value: 1* 0.1** mg/m³</th>
<th>REL Long-term value: 1* 0.1** mg/m³</th>
<th>TLV Long-term value: 1* 0.2** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>as Cu *dusts and mists **fume</td>
<td>as Cu *dusts and mists **fume</td>
<td>*dusts and mists; **fume; as Cu</td>
</tr>
</tbody>
</table>

7440-50-8 copper

PEL | Long-term value: 2 mg/m³ metal
REL | Long-term value: 2 mg/m³ metal
TLV | Long-term value: 2 mg/m³ metal

7440-31-5 tin

PEL | Long-term value: 1 mg/m³ metal
REL | Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A
TLV | Long-term value: 1.5* mg/m³ elemental, *inhalable fraction

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.
  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

<table>
<thead>
<tr>
<th>9.1 Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>· General Information</td>
</tr>
<tr>
<td>· Appearance:</td>
</tr>
<tr>
<td>· Form: Solid</td>
</tr>
<tr>
<td>· Color: copper red</td>
</tr>
<tr>
<td>· Odor: Odorless</td>
</tr>
<tr>
<td>· Odor threshold: Not determined.</td>
</tr>
<tr>
<td>· Change in condition</td>
</tr>
<tr>
<td>· Melting point/Melting range: 850-1015 °C (1562-1859 °F) (Lit.)</td>
</tr>
<tr>
<td>· Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>· Flash point: Not applicable.</td>
</tr>
<tr>
<td>· Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>· Density at 20 °C (68 °F): 8.6 g/cm³ (71.767 lbs/gal) (Lit.)</td>
</tr>
<tr>
<td>· Solubility in / Miscibility with Water: Not soluble.</td>
</tr>
<tr>
<td>9.2 Other information No further relevant information available.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>11.1 Information on toxicological effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Acute toxicity: Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>· Primary irritant effect:</td>
</tr>
<tr>
<td>· on the skin: Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>· on the eye: Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>· Sensitization: Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>· 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.</td>
</tr>
<tr>
<td>· Carcinogenic categories</td>
</tr>
<tr>
<td>· IARC (International Agency for Research on Cancer)</td>
</tr>
<tr>
<td>7440-02-0 nickel 2B</td>
</tr>
<tr>
<td>· NTP (National Toxicology Program)</td>
</tr>
<tr>
<td>7440-02-0 nickel R</td>
</tr>
<tr>
<td>· OSHA-Ca (Occupational Safety &amp; Health Administration) None of the ingredients is listed.</td>
</tr>
</tbody>
</table>
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

- **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
    - 7440-02-0 nickel
Trade name: Wieland G96

(Contd. of page 5)

- **TSCA (Toxic Substances Control Act):**
  - All ingredients are listed.
- **Proposition 65**
- **Chemicals known to cause cancer:**
  - 7440-02-0 nickel
- **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
  - TLV (Threshold Limit Value established by ACGIH)
    - 7440-02-0 nickel A5
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - 7440-02-0 nickel
- **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 08/23/2017 / 6
- * Data compared to the previous version altered.