1 Identification

1.1 Product identifier
- Trade name: **Wieland GB7**

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
- 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:
  - 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:
- CAS: 7440-50-8
  EINECS: 231-159-6
  RTECS: GL 5325000
  copper 85.0-89.0%
- CAS: 7440-31-5
  EINECS: 231-141-8
  RTECS: XP 7320000
  tin 6.0-8.0%
- CAS: 7439-92-1
  EINECS: 231-100-4
  RTECS: OF 7525000
  lead 2.5-3.5%
- CAS: 7440-02-0
  EINECS: 231-111-4
  nickel 0.2-0.0%
- CAS: 7440-66-6
  EINECS: 231-175-3
  RTECS: ZG 8600000
  zinc 1.5-3.0%

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.
7 Handling and storage

· 7.1 Precautions for safe handling:
  No special measures required.
  Open and handle receptacle with care.
· 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</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-50-8 copper</td>
<td>Long-term value: 1* 0.1** mg/m³ as Cu</td>
<td>Long-term value: 1* 0.1** mg/m³ as Cu</td>
<td>Long-term value: 1* 0.2** mg/m³ as Cu</td>
</tr>
<tr>
<td>7440-31-5 tin</td>
<td>Long-term value: 2 mg/m³ metal</td>
<td>Long-term value: 2 mg/m³</td>
<td>Long-term value: 2 mg/m³ metal</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
<td>Long-term value: 0.05* mg/m³ *see 29 CFR 1910.1025</td>
<td>Long-term value: 0.05* mg/m³ *8-hr TWA; See PocketGuide App. C</td>
<td>Long-term value: 0.05* mg/m³ *and inorganic compounds, as Pb; BEI</td>
</tr>
<tr>
<td>7440-02-0 nickel</td>
<td>Long-term value: 1 mg/m³</td>
<td>Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A</td>
<td>Long-term value: 1.5* mg/m³ elemental, *inhalable fraction</td>
</tr>
</tbody>
</table>
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: 830-1030 °C (1526-1886 °F) (Lit.)
  - Boiling point/Boiling range: Undetermined.

- Flash point: Not applicable.
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)
      7439-92-1 lead 2B
      7440-02-0 nickel 2B
    - NTP (National Toxicology Program)
      7439-92-1 lead R
      7440-02-0 nickel 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.
- Ecotoxicological effects:
- Remark: Toxic for fish
44.0 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.
  Toxic for aquatic organisms
· 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 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
    7440-66-6 zinc
    7439-92-1 lead
    7440-02-0 nickel
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.
### 44. Proposition 65

- **Chemicals known to cause cancer:**
  - 7439-92-1 lead
  - 7440-02-0 nickel

- **Chemicals known to cause reproductive toxicity for females:**
  - 7439-92-1 lead

- **Chemicals known to cause reproductive toxicity for males:**
  - 7439-92-1 lead

- **Chemicals known to cause developmental toxicity:**
  - 7439-92-1 lead

### 45. Cancerogenity categories

- **EPA (Environmental Protection Agency)**
  - 7440-50-8 copper: D
  - 7440-66-6 zinc: D, I, II
  - 7439-92-1 lead: B2

- **TLV (Threshold Limit Value established by ACGIH)**
  - 7439-92-1 lead: A3
  - 7440-02-0 nickel: A5

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - 7440-02-0 nickel

### 46. 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 / 7
- * Data compared to the previous version altered.