1 Identification

- 1.1 Product identifier
  - Trade name: Wieland G30

- 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.
### Trade name: Wieland G30

- **Components:**
  - CAS: 7440-50-8, EINECS: 231-159-6, RTECS: GL 5325000, copper 60.0-67.0%
  - CAS: 7429-90-5, EINECS: 231-072-3, RTECS: BD 0330000, aluminium 3.0-7.0%
  - CAS: 7439-96-5, EINECS: 231-105-1, RTECS: OO 9275000, manganese 2.5-5.0%
  - CAS: 7440-02-0, EINECS: 231-111-4, nickel 0-3.0%
  - CAS: 7440-66-6, EINECS: 231-175-3, RTECS: ZG 8600000, zinc balance%
  - CAS: 7439-89-6, EINECS: 231-096-4, RTECS: NO 4565500, iron 1.5-4.0%
  - CAS: 7439-92-1, EINECS: 231-100-4, RTECS: OF 7525000, lead 0-0.2%

### 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.
  - 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

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Substance</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>

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Long-term value: 15*; 5** mg/m³</th>
<th>REL Long-term value: 10* 5** mg/m³</th>
<th>TLV Long-term value: 1* mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*Total dust; ** Respirable fraction</td>
<td>as Al*Total dust **Respirable/pyro powd./welding f.</td>
<td>as Al; *as respirable fraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Ceiling limit value: 5 mg/m³ as Mn</th>
<th>REL Short-term value: 3 mg/m³</th>
<th>TLV Long-term value: 0.02* 0.1* mg/m³ as Mn; *respirable **inhalable fraction</th>
</tr>
</thead>
</table>
Trade name: Wieland G30

### 7440-02-0 nickel

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 1 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Long-term value: 0.015 mg/m³ as Ni; See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 1.5 mg/m³ elemental, *inhalable fraction</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>PEL</th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL</td>
<td>Short-term value: 10** mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Ceiling limit value: 15* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*dust only **fume</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 10* mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 2* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</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.
    - 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: 930-960 °C (1706-1760 °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): 8.2 g/cm³ (68.429 lbs/gal) (Lit.)
- Solubility in / Miscibility with Water: Not soluble.
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)
    - 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.
- Ecotoxic effects:
  - Remark: Toxic for fish
- 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.
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
- 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 MARPOL 73/78 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
  - 7429-90-5 aluminium
  - 7439-96-5 manganese
  - 7440-02-0 nickel
  - 7439-92-1 lead

- TSCA (Toxic Substances Control Act):
  All ingredients are listed.

- Proposition 65
  - Chemicals known to cause cancer:
    - 7440-02-0 nickel
    - 7439-92-1 lead

- Chemicals known to cause reproductive toxicity for females:
  - 7439-92-1 lead
### Trade name: Wieland G30

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

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

- **Cancerogenity categories**
  - EPA (Environmental Protection Agency)
    - 7440-50-8 copper D
    - 7440-66-6 zinc D, I, II
    - 7439-96-5 manganese D
    - 7439-92-1 lead B2
  - TLV (Threshold Limit Value established by ACGIH)
    - 7429-90-5 aluminium A4
    - 7440-02-0 nickel A5
    - 7439-92-1 lead A3
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - 7440-02-0 nickel

### 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.