1 Identification

1.1 Product identifier
- Trade name: Wieland GA6

1.2 Relevant identified uses of the substance or mixture and uses advised against
- No further relevant information available.

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.
Trade name: Wieland GA6

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.

- **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</th>
<th>REL Long-term value</th>
<th>TLV Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7440-50-8 copper</strong></td>
<td>1* 0.1** mg/m³ as Cu</td>
<td>1* 0.1** mg/m³ as Cu</td>
<td>1* 0.2** mg/m³ as Cu</td>
</tr>
<tr>
<td><strong>7439-92-1 lead</strong></td>
<td>0.05* mg/m³</td>
<td>0.05* mg/m³</td>
<td>0.05* mg/m³</td>
</tr>
<tr>
<td><strong>7440-31-5 tin</strong></td>
<td>2 mg/m³ metal</td>
<td>2 mg/m³</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td><strong>7440-02-0 nickel</strong></td>
<td>1 mg/m³</td>
<td>0.015 mg/m³ as Ni</td>
<td>1.5* mg/m³ elemental</td>
</tr>
</tbody>
</table>

*(Contd. of page 2)
44.0

Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Ingredient Name</th>
<th>BEI</th>
<th>Medium</th>
<th>Time</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1</td>
<td>lead</td>
<td>30 µg/100 ml</td>
<td>blood</td>
<td>not critical</td>
<td>Lead</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 µg/100 ml</td>
<td>blood</td>
<td>not critical</td>
<td>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: 900-980 °C (1652-1796 °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): 9.1 g/cm³ (75.94 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.
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.

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: 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
      - 7439-92-1 lead
      - 7440-02-0 nickel
    - TSCA (Toxic Substances Control Act):
      - All ingredients are listed.
    - 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
    - Cancerogenity categories
      - EPA (Environmental Protection Agency)
        - 7440-50-8 copper: D
        - 7439-92-1 lead: B2
      - TLV (Threshold Limit Value established by ACGIH)
        - 7439-92-1 lead: A3

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Trade name: Wieland GA6

7440-02-0 nickel

- NIOSH-Ca (National Institute for Occupational Safety and Health)
- 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.