1 Identification

1.1 Product identifier
- Trade name: Wieland SB8

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): 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 SB8

- Components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>RTECS:</th>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-50-8</td>
<td>231-159-6</td>
<td>GL 5325000</td>
<td>copper</td>
<td>66.0-70.0%</td>
</tr>
<tr>
<td>7440-66-6</td>
<td>231-175-3</td>
<td>ZG 8600000</td>
<td>zinc</td>
<td>balance%</td>
</tr>
<tr>
<td>7440-21-3</td>
<td>231-130-8</td>
<td>VW 0400000</td>
<td>silicon</td>
<td>0.7-1.3%</td>
</tr>
<tr>
<td>7439-92-1</td>
<td>231-100-4</td>
<td>OF 7525000</td>
<td>lead</td>
<td>0-0.8%</td>
</tr>
</tbody>
</table>

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:
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the other constituents have no known exposure limits.

  7440-50-8 copper
  - PEL Long-term value: 1* 0.1** mg/m³
    as Cu *dusts and mists **fume
  - REL Long-term value: 1* 0.1** mg/m³
    as Cu *dusts and mists **fume
  - TLV Long-term value: 1* 0.2** mg/m³
    *dusts and mists; **fume; as Cu

  7440-21-3 silicon
  - PEL Long-term value: 15* 5** mg/m³
    *total dust **respirable fraction
  - REL Long-term value: 10* 5** mg/m³
    *total dust **respirable fraction
  - TLV TLV withdrawn

  Additional Occupational Exposure Limit Values for possible hazards during processing:

  1314-13-2 zinc oxide
  - PEL Long-term value: 15* 5** mg/m³
    *total dust **respirable fraction and fume
  - REL Short-term value: 10** mg/m³
  - Long-term value: 5 mg/m³
    Ceiling limit value: 15* mg/m³
    *dust only **fume
  - TLV Short-term value: 10* mg/m³
    Long-term value: 2* mg/m³
    *as respirable 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.

(Contd. on page 4)
9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  
  **General Information**
  
  - **Appearance:**
    - Form: Solid
    - Color: metallic-yellow
    - Odor: Odorless
    - Odor threshold: Not determined.
  
  - **Change in condition**
    - Melting point/Melting range: 880-915 °C (1616-1679 °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):** 8.41 g/cm³ (70.181 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.

- **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.
Trade name: Wieland SB8

- 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
  - NTP (National Toxicology Program)
    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.
  - Ecotoxicological effects:
  - Remark: Very 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.
    - Very 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
    - Class Void
- 14.4 Packing group
  - DOT, ADR, IMDG, IATA Void
- 14.5 Environmental hazards:
  - Marine pollutant: No
44. 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
  - TSCA (Toxic Substances Control Act): All ingredients are listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      - 7439-92-1 lead
    - 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
    - 7440-66-6 zinc D, I, II
    - 7439-92-1 lead B2
  - TLV (Threshold Limit Value established by ACGIH)
    - 7439-92-1 lead A3
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    - None of the ingredients is listed.

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 08/24/2017 / 6
- * Data compared to the previous version altered.