# 1 Identification

- **1.1 Product identifier**
  - Trade name: **Wieland SB5**

- **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 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: C67400
  - 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.

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Trade name: Wieland SB5

### Components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>RTECS:</th>
<th>Component</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-50-8</td>
<td>231-159-6</td>
<td>GL 5325000</td>
<td>copper</td>
<td>57.0-60.0%</td>
</tr>
<tr>
<td>7439-96-5</td>
<td>231-105-1</td>
<td>OO 9275000</td>
<td>manganese</td>
<td>2.0-3.5%</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>BD 0330000</td>
<td>aluminium</td>
<td>0.5-2.0%</td>
</tr>
<tr>
<td>7440-21-3</td>
<td>231-130-8</td>
<td>VW 0400000</td>
<td>silicon</td>
<td>0.5-1.5%</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>7439-92-1</td>
<td>231-100-4</td>
<td>OF 7525000</td>
<td>lead</td>
<td>0-0.5%</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
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

- **8.1 Control parameters**

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

    | Substance | PEL | REL | TLV |
    |-----------|-----|-----|-----|
    | **7440-50-8 copper** | Long-term value: 1* 0.1** mg/m³ as Cu | Long-term value: 1* 0.1** mg/m³ as Cu | Long-term value: 1* 0.2** mg/m³ as Cu dusts and mists; **fume |
    | | Ceiling limit value: 5 mg/m³ as Mn | Short-term value: 3 mg/m³ | Long-term value: 1 mg/m³ fume, as Mn |
    | | | | Long-term value: 0.02* 0.1* mg/m³ as Mn; *respirable **inhalable fraction |
    | **7439-96-5 manganese** | Long-term value: 15*; 5** mg/m³ | Long-term value: 10* 5** mg/m³ as Al | Long-term value: 1 mg/m³ as Al; *as respirable fraction |
    | **7429-90-5 aluminium** | Long-term value: 15*; 5** mg/m³ | Long-term value: 10* 5** mg/m³ as Al | Long-term value: 1* mg/m³ as Al; **Respirable/pyro powd./welding f. |
    | **7440-21-3 silicon** | Long-term value: 15* 5** mg/m³ | Long-term value: 10* 5** mg/m³ as Al | Long-term value: 1* mg/m³ as Al; *as respirable fraction |

(Contd. of page 2)
44. 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.
  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: metallic-yellow
  Odor: Odorless
  Odor threshold: Not determined.

- Change in condition
  Melting point/Melting range: 833-885 °C (1531-1625 °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): 8.12 g/cm³ (67.761 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.
  - 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 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
    7439-96-5 manganese
    7429-90-5 aluminium
    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
  - 7439-96-5 manganese D
  - 7439-92-1 lead B2

- TLV (Threshold Limit Value established by ACGIH)
  - 7429-90-5 aluminium A4
  - 7439-92-1 lead A3

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  - None of the ingredients is listed.
  - Chemical safety assessment void.

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 09/01/2017 / 3
- * Data compared to the previous version altered.