# 1 Identification

- **1.1 Product identifier**
  - Trade name: **Wieland SY1**

- **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.
  - Components:
    - Mentioned percentages are references values.
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- **CAS: 7440-50-8**
  - EINECS: 231-159-6
  - RTECS: GL 5325000
  - Copper: 68%

- **CAS: 7439-96-5**
  - EINECS: 231-105-1
  - RTECS: OO 9275000
  - Manganese: 1.3%

- **CAS: 7440-66-6**
  - EINECS: 231-175-3
  - RTECS: ZG 8600000
  - Zinc: balance%

### 4 First-aid measures

- **4.1 Description of first aid measures**
  - General information:
    - No special measures required.
  - First Aid information must refer to any dust which is generated.
  - After inhalation:
    - Supply fresh air and be sure to 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 of the collected material according to regulations.
- **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.
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- 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:

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL Long-term value: 1* 0.1** mg/m³ as Cu</th>
<th>REL Long-term value: 1* 0.1** mg/m³ as Cu</th>
<th>TLV Long-term value: 1* 0.2** mg/m³ as Cu</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-50-8 copper</td>
<td>*dusts and mists **fume</td>
<td>*dusts and mists **fume</td>
<td>*dusts and mists **fume; as Cu</td>
</tr>
<tr>
<td>7439-96-5 manganese</td>
<td>Ceiling limit value: 5 mg/m³ as Mn</td>
<td>Short-term value: 3 mg/m³ fume, as Mn</td>
<td>Long-term value: 1 mg/m³ fume, as Mn</td>
</tr>
<tr>
<td></td>
<td>REL Short-term value: 3 mg/m³</td>
<td>Long-term value: 1 mg/m³ fume, as Mn</td>
<td>Long-term value: 0.02* 0.1* mg/m³</td>
</tr>
<tr>
<td></td>
<td>REL Short-term value: 3 mg/m³</td>
<td>Long-term value: 1 mg/m³ fume, as Mn</td>
<td>as Mn; *respirable **inhalable fraction</td>
</tr>
<tr>
<td></td>
<td>REL Short-term value: 3 mg/m³</td>
<td>Long-term value: 1 mg/m³ fume, as Mn</td>
<td>as Mn; *respirable **inhalable fraction</td>
</tr>
<tr>
<td></td>
<td>REL Short-term value: 3 mg/m³</td>
<td>Long-term value: 1 mg/m³ fume, as Mn</td>
<td>as Mn; *respirable **inhalable fraction</td>
</tr>
<tr>
<td>1314-13-2 zinc oxide</td>
<td>PEL Long-term value: 15* 5** mg/m³</td>
<td>REL Short-term value: 10** mg/m³</td>
<td>TLV Short-term value: 10* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust **respirable fraction and fume</td>
<td>Long-term value: 5 mg/m³</td>
<td>Long-term value: 2* mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 15* mg/m³</td>
<td>Ceiling limit value: 15* mg/m³</td>
<td>as respirable fraction</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 5 mg/m³</td>
<td>*dust only **fume</td>
<td></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:
    - 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.
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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: 865-907 °C (1589-1665 °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): 8.33 g/cm³ (69.514 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.

11.2 Carcinogenic categories
- IARC (International Agency for Research on Cancer)
  - None of the ingredients is listed.
- NTP (National Toxicology Program)
  - None of the ingredients is listed.

(Contd. on page 5)
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
  - 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):
      All ingredients are listed.
    - TSCA (Toxic Substances Control Act):
      All ingredients are listed.
    - Proposition 65
      - Chemicals known to cause cancer:
        None of the ingredients is listed.
      - Chemicals known to cause reproductive toxicity for females:
        None of the ingredients is listed.
      - Chemicals known to cause reproductive toxicity for males:
        None of the ingredients is listed.
      - Chemicals known to cause developmental toxicity:
        None of the ingredients is listed.
    - Cancerogenity categories
      - EPA (Environmental Protection Agency)
        | Substance      | Category |
        |----------------|----------|
        | 7440-50-8 copper | D        |
        | 7440-66-6 zinc  | D, I, II |
        | 7439-96-5 manganese | D   |
      - TLV (Threshold Limit Value established by ACGIH)
        None of the ingredients is listed.
    - NIOSH-Ca (National Institute for Occupational Safety and Health)
      None of the ingredients is listed.
  - 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 08/24/2017 / 2
- * Data compared to the previous version altered.