1 Identification

1.1 Product identifier
· Trade name: Wieland SnTop

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: Metallic coatings on a 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 Corporate EHS and Standardization Affairs
  stefan.priggemeyer@wieland.com
· Emergency telephone number:
  Factory security offices
  Phone: +49 (0) 731-944-2794

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
· 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 classification of the respective pure substance and are for information only. Metallic coatings are special preparations according to Regulation (EC) 1907/2006 (REACH Regulation). The classification of a pure substance is not applicable to its use as a constituent of a metallic coating. Further information concerning the semi-finished product are given in the information sheet for articles of the respective semi-finished product.

- Components:
  CAS: 7440-31-5
  EINECS: 231-141-8
  RTECS: XP 7320000
  Tin
  balance%
Trade name: Wieland SnTop

<table>
<thead>
<tr>
<th>CAS: 7440-22-4</th>
<th>silver</th>
<th>4.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 231-131-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 7440-50-8</th>
<th>copper</th>
<th>max.2.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 231-159-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTECS: GL 5325000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 7439-92-1</th>
<th>lead</th>
<th>max.0.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 231-100-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RTECS: OF 7525000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[\text{Acute Tox. 3; H301; Carc. 2; H351; Repir. 1A; H360-H362}\]

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 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 precautions are necessary if used correctly.
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</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440-31-5 tin (tin)</td>
<td>Long-term value: 2 mg/m³</td>
<td>Long-term value: 2 mg/m³</td>
<td>Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td></td>
<td>metal</td>
<td>metal</td>
<td>metal</td>
</tr>
<tr>
<td>7440-22-4 silver (silver)</td>
<td>Long-term value: 0.01 mg/m³</td>
<td>Long-term value: 0.01 mg/m³</td>
<td>Long-term value: 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>metal: dust and fume</td>
<td>metal: dust and fume</td>
<td>metal: dust and fume</td>
</tr>
<tr>
<td>7440-50-8 copper (copper)</td>
<td>Long-term value: 1* 0.1** mg/m³</td>
<td>Long-term value: 1* 0.1** mg/m³</td>
<td>Long-term value: 1* 0.2** mg/m³</td>
</tr>
<tr>
<td></td>
<td>as Cu dusts and mists; **fume</td>
<td>as Cu dusts and mists; **fume</td>
<td>as Cu dusts and mists; **fume</td>
</tr>
<tr>
<td></td>
<td></td>
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<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.
   · 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: silver
46.0

· Odor: Odorless
· Odor threshold: Not determined.

· Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.
· Danger of explosion: Product does not present an explosion hazard.
· Density: Not determined.
· Solubility in / Miscibility with
  Water: Not soluble.
  VOC content: 0.00 %

· 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:
· 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.
68. Additional ecological information
   General notes: Metallic coatings on a semi-finished product are insoluble 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
   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 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):
   7440-22-4 silver
   7440-50-8 copper
   7439-92-1 lead

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

   Proposition 65
   Chemicals known to cause cancer:
   7439-92-1 lead
Trade name: **Wieland SnTop**

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1 lead</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for males:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1 lead</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause developmental toxicity:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1 lead</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Cancerogenity categories</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPA (Environmental Protection Agency)</strong></td>
<td></td>
</tr>
<tr>
<td>7440-22-4 silver</td>
<td>D</td>
</tr>
<tr>
<td>7440-50-8 copper</td>
<td>D</td>
</tr>
<tr>
<td>7439-92-1 lead</td>
<td>B2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>TLV (Threshold Limit Value established by ACGIH)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1 lead</td>
<td>A3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>NIOSH-Ca (National Institute for Occupational Safety and Health)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
<tr>
<td>Chemical safety assessment void.</td>
<td></td>
</tr>
</tbody>
</table>

### 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 Corporate EHS and Standardization Affairs
- **Contact:**
  - Dr. Stefan Priggemeyer
  - Phone (+)49 (0)731/944-2794
- **Date of preparation / last revision:** 02/05/2018 / 5
- *** Data compared to the previous version altered.**