1 Identification

- 1.1 Product identifier
  - Trade name: Wieland A11

- 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 aluminium or aluminium- 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.
  - Information:
    The classifications mentioned below reflect the respective pure substance and are for information only.
    Aluminium 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 aluminium alloy.
Trade name: Wieland A11

4. Components:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>RTECS</th>
<th>Component</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>BD 0330000</td>
<td>aluminium</td>
<td>balance%</td>
</tr>
<tr>
<td>7440-21-3</td>
<td>231-130-8</td>
<td>VW 0400000</td>
<td>silicon</td>
<td>0.6-1.4%</td>
</tr>
<tr>
<td>7440-31-5</td>
<td>231-141-8</td>
<td>XP 7320000</td>
<td>tin</td>
<td>0.6-1.2%</td>
</tr>
<tr>
<td>7439-95-4</td>
<td>231-104-6</td>
<td>OM 2100000</td>
<td>magnesium</td>
<td>0.40-0.9%</td>
</tr>
<tr>
<td>7440-69-9</td>
<td>231-177-4</td>
<td>EB 2600000</td>
<td>bismuth</td>
<td>0.30-0.8%</td>
</tr>
<tr>
<td>7439-96-5</td>
<td>231-105-1</td>
<td>OO 9275000</td>
<td>manganese</td>
<td>0.20-0.6%</td>
</tr>
<tr>
<td>7440-50-8</td>
<td>231-159-6</td>
<td>GL 5325000</td>
<td>copper</td>
<td>0.20-0.50%</td>
</tr>
</tbody>
</table>

5. 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:
  The semi-finished product is not combustible in the form in which it is supplied.
  A fire caused by aluminium powder and swarf must only be tackled with dry sand or Class D fire extinguishing agents approved for this purpose.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.
5.3 Advice for firefighters
- Protective equipment:
  If necessary, protective clothing and respiratory protection masks should be worn.
  The local fire brigade can advise you on risks and fire fighting.

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.
- 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

<table>
<thead>
<tr>
<th>7429-90-5 aluminium</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL Long-term value: 15*; 5** mg/m³</td>
</tr>
<tr>
<td>*Total dust; ** Respirable fraction</td>
</tr>
<tr>
<td>REL Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td>as Al; Total dust**Respirable/pyro powd./welding f.</td>
</tr>
<tr>
<td>TLV Long-term value: 1* mg/m³</td>
</tr>
<tr>
<td>as Al; *as respirable fraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7440-21-3 silicon</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td>*Total dust **respirable fraction</td>
</tr>
<tr>
<td>REL Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td>*Total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV TLV withdrawn</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7440-31-5 tin</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td>metal</td>
</tr>
<tr>
<td>REL Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td>metal</td>
</tr>
<tr>
<td>TLV Long-term value: 2 mg/m³</td>
</tr>
<tr>
<td>metal</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
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: grey to silvery grey
· 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 at 20 °C (68 °F): 2.72 g/cm³ (22.698 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.
Trade name: Wieland A11

44.0

- 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)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - 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:
    Semi-finished articles from aluminium and aluminium-alloy are 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.
**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):
    - 7429-90-5 aluminium
    - 7439-96-5 manganese
    - 7440-50-8 copper
  - 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)
      - 7439-96-5 manganese D
      - 7440-50-8 copper D
    - TLV (Threshold Limit Value established by ACGIH)
      - 7429-90-5 aluminium A4
    - 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 09/11/2017 / 1
- * Data compared to the previous version altered.