1. Chemical Identification

Trade-name: Solder Sn97Cu3
Manufacturer: Stannol GmbH
Oskarstr.3-7
42283 Wuppertal
Phone.: 0202 / 5850 sec.phone.:0202 / 585119
Phone: 0202 / 585118

2. Composition/Information of Ingredients

Chemical characteristic: Alloy Tin-Copper

In Ingredients

<table>
<thead>
<tr>
<th>Content</th>
<th>CAS-No.</th>
<th>Symbols</th>
<th>Risk-Phrases</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remainder%</td>
<td>7440-31-5</td>
<td></td>
<td></td>
<td>Tin</td>
</tr>
<tr>
<td>2.5-3.5%</td>
<td>7440-50-8</td>
<td></td>
<td></td>
<td>Copper</td>
</tr>
</tbody>
</table>

3. Hazards Identification:

Not a composition for the purposes of the Dangerous Substances Regulations, but nevertheless observe items 4-16

4. First Aid Measures:

In case of contact with skin: In use of contact with molten liquid solder, cool with plenty of water, seek medical attention

5. Fire Fighting Measures

Extinguishing Media: This material is not flammable
Special Fire-fighting Procedures: Use extinguishing media appropriate to surrounding fire con

6. Accidental Release Measures:

Pick up and place in appropriate container

7. Handling and Storage:

The fumes produced during soldering should be extracted away from the breathing zone of the operators. Ensure the area is well ventilated. Wash hands with soap and warm water after handling, particularly before eating, drinking or smoking. The product should be stored in a cool, dry area.
8. Exposure Controls / Personal Protection:

Local exhaust and control of process conditions are suitable methods when dust, fumes and vapours are developed. Where engineering controls and work practices are not effective in controlling exposure then suitable respiratory protective equipment should be used.

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No</th>
<th>ml/m³ (ppm)</th>
<th>mg/m³</th>
<th>Art</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>7440-31-5</td>
<td>2</td>
<td></td>
<td>MAK (NL)</td>
</tr>
<tr>
<td>Copper</td>
<td>7440-50-8</td>
<td>1</td>
<td></td>
<td>MAK (DFG)</td>
</tr>
</tbody>
</table>

Respiratory Protection: If concentrations are over the exposure limit, use a supplied air respirator.
Hand Protection: Use heat resistant gloves if required.
Eye Protection: Operators should wear goggles.

9. Physical and Chemical Properties

Appearance:
- Form: solid
- Colour: metallic
- Odour: odourless

Melting Point: 230-250°C
Vapour Pressure: n.a.
Density (20°C): 7.8 g/cm³

10. Stability and Reactivity:

Dangerous reactions: Possible with oxidising agents.
Hazardous combustion or decomposition products: none

11. Toxicological Information

Acute Effects:
- None toxic metal.

Toxicity Data:

12. Ecological Information:
- No effect to environment known

13. Disposal Considerations:
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state and local environmental regulations. Collect metal for recycling.

14. Transport Information:
GGVS/ADR/RID: The product is not classified as hazardous for transport.

15. Regulatory Information:
- Not subject to current legislation

16. Other Information:

Other information
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

Safety data-sheet is written by:
Stannol GmbH

Contact-person:
Dr. W. Kruppa