Solder Paste No-Clean Sn96.5/Ag3.0/Cu0.5 60g T4 Mesh
Two Part Mix™ [PATENT PENDING]

Product Highlights
2 year shelf life unrefrigerated before mixed
Printing speeds up to 100mm/sec
Long stencil life
Wide process window
Clear residue
Low voiding
Excellent wetting compatibility on most board finishes
Passes BONO test @1.56%
RoHS II and REACH compliant

Specifications
Alloy: Sn96.5/Ag3.0/Cu0.5
Mesh Size: T4
Micron (µm) Range: 20-38
Flux Type: Synthetic No-Clean
Flux Classification: REL0
Metal Load: 87% Metal by Weight
Melting Point: 217-220°C (423-428°F)
Packaging: 2 compartment bag, includes Jar for after mixed storage, 60g
Shelf Life:
Before Mixed: Refrigerated >24 months, Unrefrigerated >24 months
After Mixed: Refrigerated >6 months, Unrefrigerated >2 months

How to Mix the Two Parts
This product MUST BE MIXED within its bag before use. To mix, squeeze the flux pocket towards the solder powder pocket and the seal between the two compartments will break open, creating a single pocket bag. Then knead the mixture back and forth for 2-3 minutes, or until a uniform consistency is achieved.

Printer Operation
Print Speed: 25-100mm/sec
Squeegee Pressure: 70-250g/cm of blade
Under Stencil Wipe: Once every 10-25 prints, or as necessary

Stencil Life
>8 hours @ 20-50% RH 22-28°C (72-82°F)
>4 hours @ 50-70% RH 22-28°C (72-82°F)

Stencil Cleaning
Automated stencil cleaning systems for both stencil and misprinted boards. Manual cleaning using isopropyl alcohol (IPA).

Storage and Handling
Before Mixed: Store refrigerated or at room temperature 3-25°C (37-77°F). Do not freeze.
After Mixed: Refrigerate at 3-8°C (37-46°F). Do not freeze. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use. Once mixed, the solder paste can be dispensed by cutting a small corner off the bag. It can be resealed with a piece of Scotch® tape, or it can be stored by dispensing the entire bag into the provided empty jar.
**Recommended Profile**

Reflow profile for Sn96.5/Ag3.0/Cu0.5 solder assembly, designed as a starting point for process optimization.

![Temperature vs Time Graph]

**Test Results**

<table>
<thead>
<tr>
<th>Test J-STD-004 or other requirements as stated</th>
<th>Test Requirement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper Mirror</td>
<td>IPC-TM-650: 2.3.32 L:</td>
<td>No breakthrough</td>
</tr>
<tr>
<td>Corrosion</td>
<td>IPC-TM-650: 2.6.15 L:</td>
<td>No corrosion</td>
</tr>
<tr>
<td>Quantitative Halides</td>
<td>IPC-TM-650: 2.3.28.1 L:</td>
<td>&lt;0.5%</td>
</tr>
<tr>
<td>Electrochemical Migration</td>
<td>IPC-TM-650: 2.6.14.1 L:</td>
<td>&lt;1 decade drop (No-clean)</td>
</tr>
<tr>
<td>Surface Insulation Resistance 85°C, 85% RH @ 168 Hours</td>
<td>IPC-TM-650: 2.6.3.7 L:</td>
<td>≥100MΩ (No-clean)</td>
</tr>
<tr>
<td>Tack Value</td>
<td>IPC-TM-650: 2.4.44</td>
<td>64g</td>
</tr>
<tr>
<td>Viscosity – Malcom @ 10 RPM/25°C (x10³mPa/s)</td>
<td>IPC-TM-650: 2.4.34.4 Print:</td>
<td>155-215, Dispense: 125-170</td>
</tr>
<tr>
<td>Visual</td>
<td>IPC-TM-650: 3.4.2.5</td>
<td>Clear and free from precipitation</td>
</tr>
<tr>
<td>Conflict Minerals Compliance</td>
<td>Electronic Industry Citizenship Coalition (EICC)</td>
<td>Compliant</td>
</tr>
<tr>
<td>REACH Compliance</td>
<td>Articles 33 and 67 of Regulation (EC) No 1907/2006</td>
<td>Contains no substance &gt;0.1% w/w that is listed as a SVHC or restricted for use in solder materials</td>
</tr>
</tbody>
</table>

**Conforms to the following Industry Standards:**

- J-STD-004B, Amendment 1 (Solder Fluxes): Yes
- J-STD-005A (Solder Pastes): Yes
- J-STD-006C, Amendments 1 & 2 (Solder Alloys and Fluxed/Non-Fluxed Solders): Yes
- RoHS 2 Directive 2011/65/EU: Yes