

Solder Paste No-Clean Sn42/Bi57.6/Ag0.4 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
RoHS II and REACH compliant

Specifications

Alloy:	Sn42/Bi57.6/Ag0.4
Mesh Size:	T4
Micron (µm) Range:	20-38
Flux Type:	Synthetic No-Clean
Flux Classification:	RELO
Metal Load:	87% Metal by Weight
Melting Point:	138°C (281°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

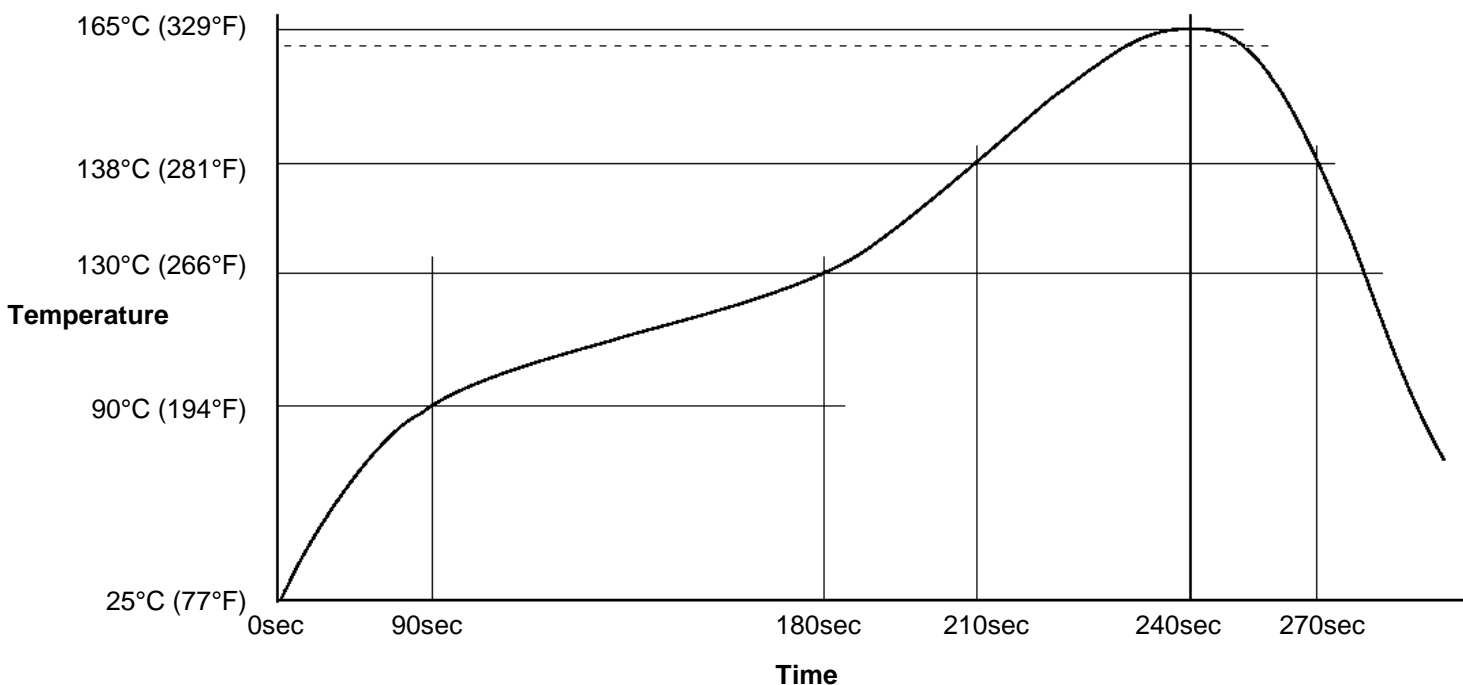
Before Mixed: Store refrigerated or at room temperature 3-25°C (37-77°F). Do not freeze.
After Mixed: Refrigerate at 3-8°C (37-46°F). Do not freeze. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use. Once mixed, the solder paste can be dispensed by cutting 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.

Transportation

This product has no shipping restrictions. Shipping below 0°C (32°F) or above 25°C (77°F) for normal transit times by ground or air will not impact this product's stated shelf life.

Recommended Profile

Reflow profile for Sn42/Bi57.6/Ag0.4 solder assembly, designed as a starting point for process optimization.



Test Results

Test J-STD-004 or other requirements as stated	Test Requirement	Result
Copper Mirror	IPC-TM-650: 2.3.32	L: No breakthrough
Corrosion	IPC-TM-650: 2.6.15	L: No corrosion
Quantitative Halides	IPC-TM-650: 2.3.28.1	L: <0.5%
Electrochemical Migration	IPC-TM-650: 2.6.14.1	L: <1 decade drop (No-clean)
Surface Insulation Resistance 85°C, 85% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	L: ≥100MΩ (No-clean)
Tack Value	IPC-TM-650: 2.4.44	48g
Viscosity – Malcom @ 10 RPM/25°C (x10 ³ mPa/s)	IPC-TM-650: 2.4.34.4	Print: 125-180, Dispense: 90-130
Visual	IPC-TM-650: 3.4.2.5	Clear and free from precipitation
Conflict Minerals Compliance	Electronic Industry Citizenship Coalition (EICC)	Compliant
REACH Compliance	Articles 33 and 67 of Regulation (EC) No 1907/2006	Contains no substance >0.1% w/w that is listed as a SVHC or restricted for use in solder materials

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