

4860P



Sn63/Pb37 Solder Paste—No-Clean

Sn63/Pb37 solder paste, also known as Sn63 solder paste or 63 37 solder paste, is a no-clean solder paste that is made from a blend of high purity, non-recycled tin and lead alloy powder combined with a no-clean flux to form a paste. It is designed for surface mount applications and provides high tack force and good wettability. The post-soldering residues are transparent, non-conductive, non-corrosive, and highly insulated. (“No-clean” means that residues are not harmful to assemblies.)

It is designed for use in high-speed printing and is an ideal choice for SMT solder paste printers. It can yield brick-like prints even when using ultra-fine pitch stencils as small as 0.3 mm.



Features & Benefits

- Alloy exceeds J-STD-006C and meets ASTM B 32 purity requirements
- Flux meets J-STD-004B
- Non-corrosive
- Non-conductive residue
- Halide-free
- Good wettability
- Type 3 (45–25 μm)

Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
4860P-35G	Syringe	4.21 mL	35 g

Contact Information

MG Chemicals, 1210 Corporate Drive
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Phone: North America: +(1)800-340-0772

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Properties

Flux Classification	RELO
Flux Type	Resin
Flux Activity	Low
Copper Mirror	No removal
Corrosion Test	Pass
Electromigration	Pass
Solder Ball Test	Pass
Slump Test	
@ 25 °C, 0.63 vert./horiz.	No bridges
@ 150 °C, 0.63 vert./horiz.	No bridges
@ 25 °C, 0.33 vert./horiz.	0.20/0.20
@ 150 °C, 0.33 vert./horiz.	0.20/0.20
Viscosity, poise	850–1100
Acid Number (mgKOH/g sample)	100
Halides (by weight)	<0.05 %
Post Reflow Flux Residue	45 %
Metal Loading	88 %
Surface Insulation Resistance (SIR)	$2.4 \times 10^{10} \Omega$
Bellcore (Telecordia)	$4.1 \times 10^{10} \Omega$
Tack	
Initial	85 g
Retention @ 24 h	90 g
Retention @ 72 h	92 g

Application Instructions

Read the product SDS before using this product (downloadable at www.mgchemicals.com).

1. Take solder paste out of refrigerator and allow it to reach room temperature prior use.
2. Remove the cap from the syringe. Do not discard cap.
3. Insert plunger to the back of the syringe. For better control, insert needle to the tip.
4. Dispense paste onto the desired area and place component on top.
5. Apply heat using a heat gun.
6. Clean tip to prevent contamination and material buildup.
7. Replace the cap on the syringe.
8. (Optional) Clean residue with MG #8241-T or #8241-W Isopropyl Alcohol Wipes.

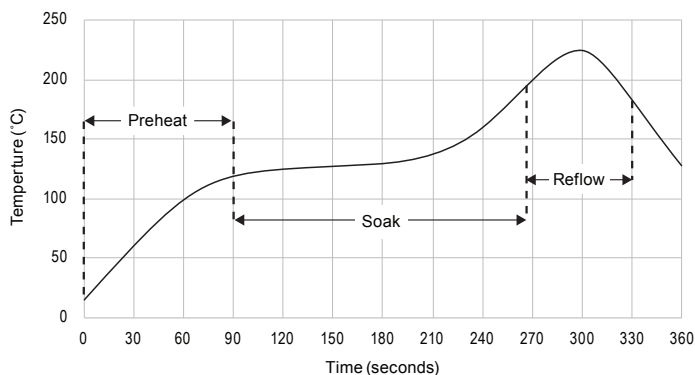
Reflow

Best results are achieved when the paste is reflowed in a forced air convection oven with a minimum of 8 zones. The following is a recommended profile for a forced air convection reflow process.

Preheat Zone—It is the ramp zone, which elevates the temperature of the PCB to the desired soak temperature. The rate of temperature rise should not exceed 2.5 °C/s to avoid thermal shock stress.

Soak Zone—It exposes the PCB to a stable temperature that allows the components to reach a uniform temperature. It allows the flux to concentrate and the volatiles to escape from the paste.

Reflow Zone—It is the spike zone, which elevates the temperature of the PCB assembly from the activation temperature to the recommended peak temperature.



Storage and Handling

Store refrigerated between 2–10 °C in an upright position with tip down to prevent flux separation and air entrapment.

Unopened Container

Shelf Life @ 2–10 °C 2 years

Shelf Life @ 20–25 °C 1 year

Disclaimer

This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.