

Solder Paste No-Clean Sn63/Pb37

Product Highlights

Printing speeds up to 100mm/sec
Long stencil life, Wide process window
Clear residue
Low voiding

Excellent wetting compatibility on most board finishes
Compatible with enclosed print heads
Passes BONO corrosion test
REACH compliant flux

Specifications

Alloy: Sn63/Pb37
Flux Type: No-Clean
Flux Classification: ROL0
Melting Point: 183°C (361°F)
Shelf Life: Refrigerated >12 months, Room Temperature > 1 month

Orderable Part Numbers	Mesh Size (Micron Range)	Metal Load	Application	Packaging
HMT29PB-T3-35S	T3 (25-45 µm)	87%	Dispense	35g syringe
HMT29PB-T3-100S				100g syringe
HMT29PB-T3-500J		90%	Print	500g jar
HMT29PB-T3-600C				600g cartridge
HMT29PB-T4-35S	T4 (20-38 µm)	87%	Dispense	35g syringe
HMT29PB-T4-100S				100g syringe
HMT29PB-T4-500J		90%	Print	500g jar
HMT29PB-T4-600C				600g cartridge
HMT29PB-T5-35S	T5 (15-25 µm)	87%	Dispense	35g syringe
HMT29PB-T5-100S				100g syringe
HMT29PB-T5-500J		90%	Print	500g jar
HMT29PB-T5-600J				600g cartridge

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)
>6 hours @ 50-70% RH 22-28°C (72-82°F)

Cleaning

HMT29PB is a no-clean solder paste that can be left on the board for most SMT assemblies. For applications requiring cleaning, HMT29PB can be removed with HMT175CS Co-Solvent series flux cleaner.

Storage and Handling

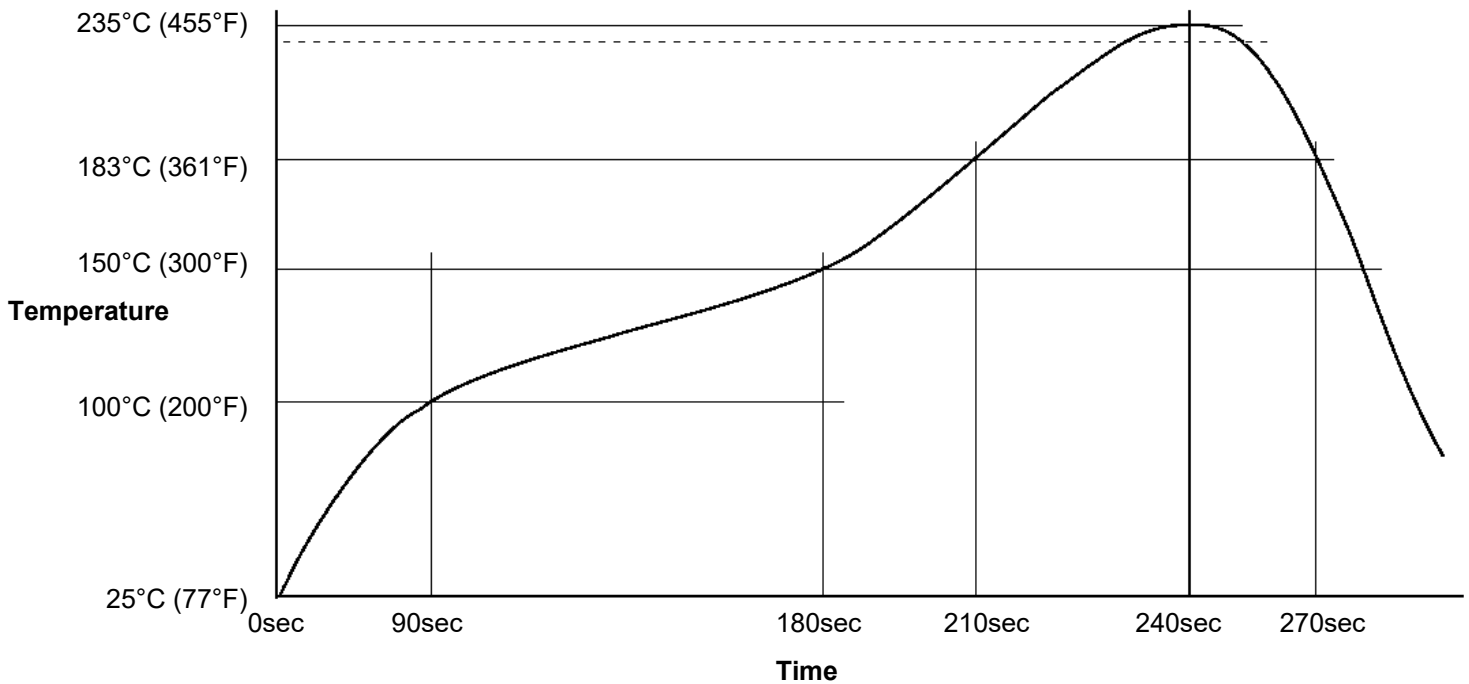
Refrigerate at 3-8°C (37-46°F). Do not freeze. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use.

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 Sn63/Pb37 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 (uncleaned)
Quantitative Halides	IPC-TM-650: 2.3.28.1	L: <0.05
Electrochemical Migration	IPC-TM-650: 2.6.14.1	L: <1 decade drop (uncleaned)
Surface Insulation Resistance 40°C, 90% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	L: ≥100MΩ (uncleaned)
Tack Value	IPC-TM-650: 2.4.44	38-45g
Viscosity – Malcom @ 10 RPM/25°C (x10 ³ mPa·s)	IPC-TM-650: 2.4.34.4	Print: 165-225, Dispense: 75-105
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):

J-STD-005A (Solder Pastes):

J-STD-006C, Amendments 1 & 2 (Solder Alloys and Fluxed/Non-Fluxed Solders):

RoHS 3 Directive (EU) 2015/863:

Yes

Yes

Yes

No (Contains Lead)