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# Solder Paste No-Clean Sn63/Pb37

#### **Product Highlights**

Higher Activity No-Clean, Better Wetting 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
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
HMT55PB-T3-35S	- T3 (25-45 μm)	87%	Dispense	35g syringe
HMT55PB-T3-100S				100g syringe
HMT55PB-T3-500J		89.5%	Print	500g jar
HMT55PB-T3-600C				600g cartridge
HMT55PB-T4-35S	- T4 (20-38 μm)	87%	Dispense	35g syringe
HMT55PB-T4-100S				100g syringe
HMT55PB-T4-500J		89.5%	Print	500g jar
HMT55PB-T4-600C				600g cartridge
HMT55PB-T5-35S	- T5 (15-25 μm)	87%	Dispense	35g syringe
HMT55PB-T5-100S				100g syringe
HMT55PB-T5-500J		89.25%	Print	500g jar
HMT55PB-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

HMT55PB is a no-clean solder paste that can be left on the board for most SMT assemblies. For applications requiring cleaning, HMT55PB can be removed with HMT175CS Co-Solvent series flux cleaner.

#### **Storage and Handling**

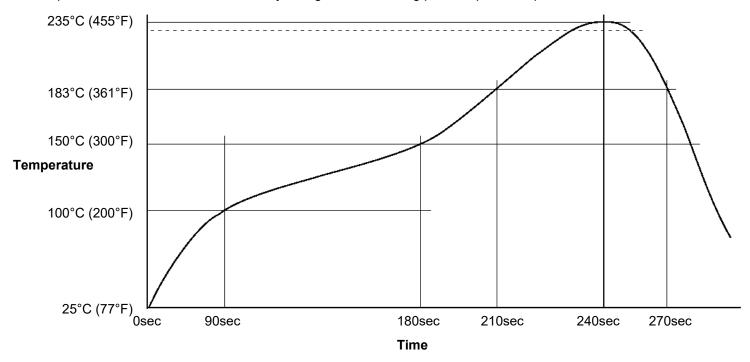
Refrigerate at 3-8°C (37-46°F). Do not freeze. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use.

## **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**

est results		
Test J-STD-004 or other	Test Requirement	Result
requirements as stated		
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 (x10³mPa·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):

Yes

Yes

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

Yes

Yes

Yes

Yes

No (Contains Lead)