

Datasheet revision 1.1 www.chipquik.com

# Thermally Stable Solder Paste WS (Water-Soluble) Sn63/Pb37 T4 (500g jar)

### **Product Highlights**

Revolutionary Formula: No Refrigeration Required!

Printing speeds up to 100mm/sec

Long stencil life

Wide process window

Excellent Wetting with Moderate Activity (REM0) Flux Water-Soluble Easily cleaned with water (60°C+)

Low voiding Compatible with most board finishes Print grade Compatible with enclosed print heads



Alloy: Sn63/Pb37

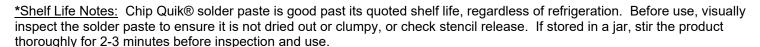
Mesh Size: T4
Micron (µm) Range: 20-38

Flux Type: Synthetic Water-Soluble

Flux Classification: REM0 (Residue must be water-washed at 60°C+ after reflow)

Metal Load: 90% Metal by Weight Melting Point: 183°C (361°F)
Packaging: 500g Jar

Shelf Life: Refrigerated >6 months, Unrefrigerated >6 months \*See notes below:



Chip Quik® solder paste is manufactured using Made in USA high quality synthetic flux and precision atomized metal powder. Chip Quik® solder paste is guaranteed for 12 months from date of manufacture, regardless of refrigeration. If you have any issues with our solder paste, please contact Chip Quik® directly for no charge warranty replacement. Please retain original bill of sale, and solder paste in original container as we may request its return for internal R&D testing purposes.

## **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

Store at 3-25°C (37-77°F). Do not freeze. Refrigeration is not required, but will extend shelf life. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use.

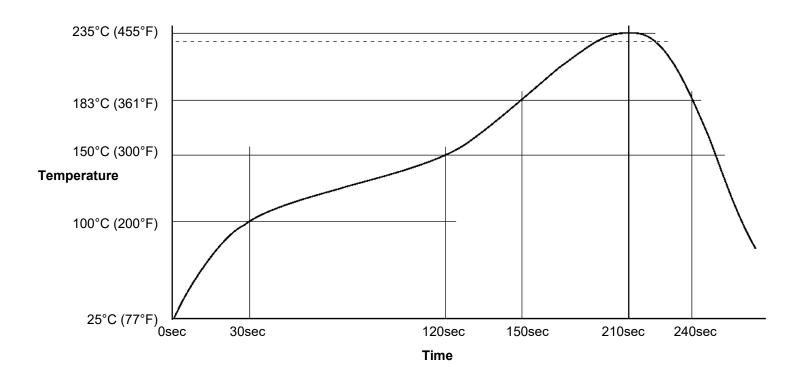
#### **Transportation**

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**

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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: <0.05%
Electrochemical Migration	IPC-TM-650: 2.6.14.1	L: <1 decade drop
Surface Insulation Resistance 85°C, 85% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	L: ≥100MΩ
Tack Value	IPC-TM-650: 2.4.44	37g
Viscosity – Malcom @ 10 RPM/25°C (x10³mPa/s)	IPC-TM-650: 2.4.34.4	Print: 200-275, Dispense: 100-140
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 Lead (Pb) CAS# 7439-92-1 No other SVHC present

# **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 3 Directive (EU) 2015/863:	No