# **CHIPQUIK®**

# **SMD291AX500T3C**

Datasheet revision 1.5 www.chipquik.com

## Solder Paste No-Clean Sn63/Pb37 in 6oz Cartridge 500g T3 Mesh

#### **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
Dispense grade
Compatible with enclosed print heads
Passes BONO test

#### **Specifications**

Alloy: Sn63/Pb37

Mesh Size: T3 Micron (µm) Range: 25-45

Flux Type: Synthetic No-Clean

Flux Classification: REL0

Metal Load:88% Metal by WeightMelting Point:183°C (361°F)Packaging:6oz/500g Cartridge

Shelf Life: Refrigerated >12 months, Unrefrigerated >6 months \*See notes below:

\*Shelf Life Notes: Chip Quik® solder paste is good past its quoted shelf life, regardless of refrigeration. Before use, visually inspect the solder paste to ensure it is not dried out or clumpy, or check stencil release. If stored in a jar, stir the product thoroughly for 2-3 minutes before inspection and use.

Chip Quik® solder paste is manufactured using 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

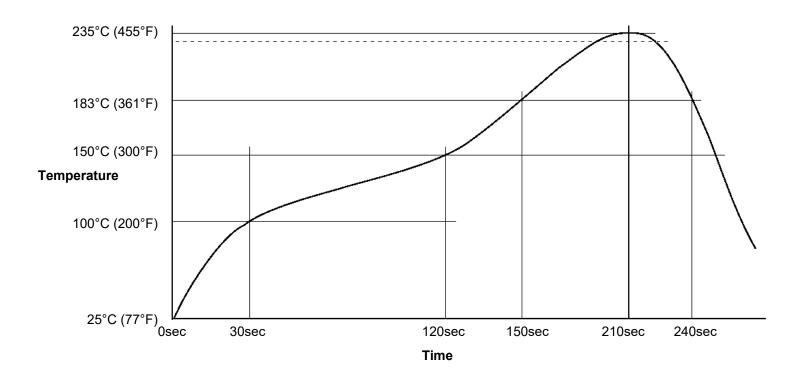
Refrigerate at 3-8°C (37-46°F). Do not freeze. Allow 4 hours for solder paste to reach an operating temperature of 20-25°C (68-77°F) before use.

#### **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                                            |
| 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 (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                                    | 44g                                                        |
| Viscosity – Malcom @ 10 RPM/25°C<br>(x10³mPa/s)        | IPC-TM-650: 2.4.34.4                                  | Print: 210-300, 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)<br>No 1907/2006 | Contains Lead (Pb) CAS# 7439-92-1<br>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  |