Datasheet revision 1.1 www.chipquik.com

# Solder Paste No-Clean SAC305 in Jar 250g 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
Print grade
Compatible with enclosed print heads
Passes BONO test @1.56%
RoHS II and REACH compliant

## Specifications

| | |
|---|---|
| Alloy: | Sn96.5/Ag3.0/Cu0.5 |
| Mesh Size: | T3 |
| Micron (µm) Range: | 25-45 |
| Flux Type: | Synthetic No-Clean |
| Flux Classification: | REL0 |
| Metal Load: | 88.5% Metal by Weight |
| Melting Point: | 217-220°C (423-428°F) |
| Packaging: | Jar 250g |
| Shelf Life: | Refrigerated >6 months, Unrefrigerated >2 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 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

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.


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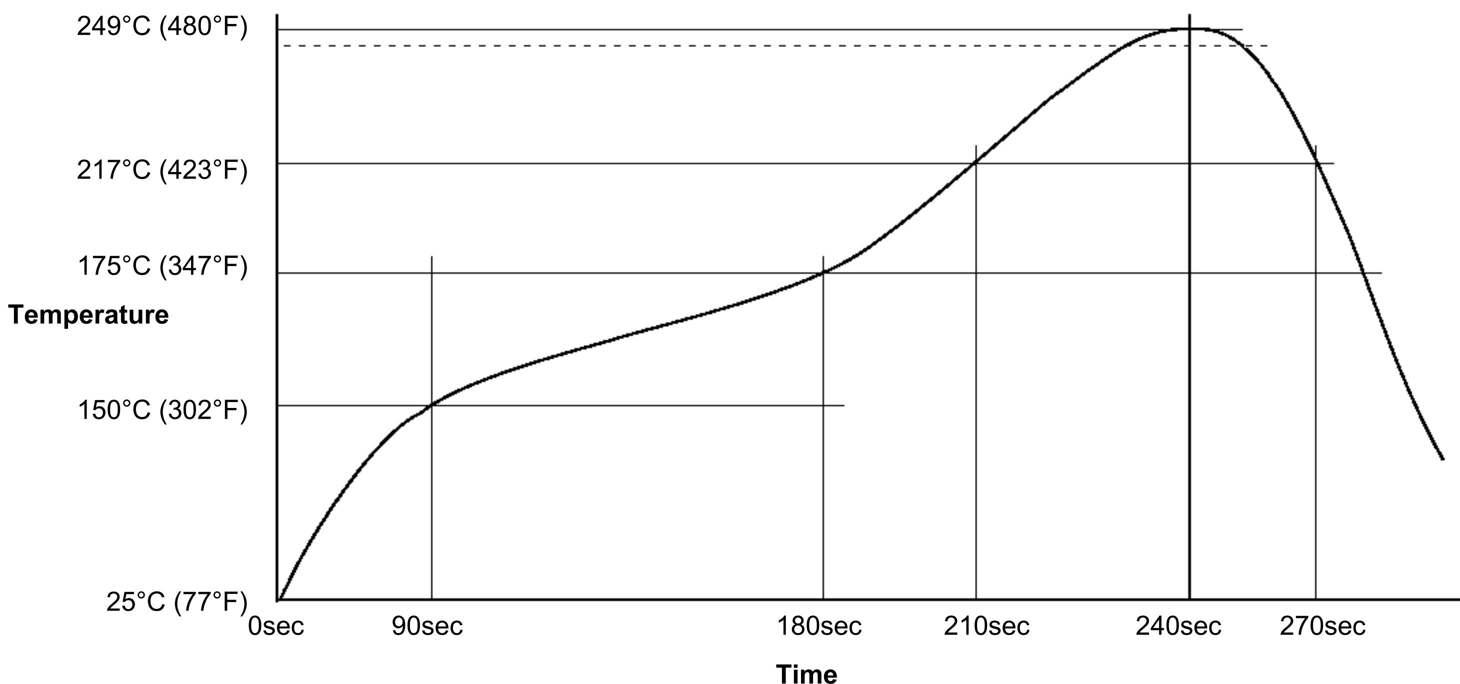
## Recommended Profile

Reflow profile for Sn96.5/Ag3.0/Cu0.5 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: <0.5% |
| 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 | 64g |
| Viscosity – Malcom @ 10 RPM/25°C ($x10^3$mPa/s) | IPC-TM-650: 2.4.34.4 | Print: 155-215, Dispense: 125-170 |
| 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): | Yes |
| J-STD-005A (Solder Pastes): | Yes |
| J-STD-006C, Amendments 1 & 2 (Solder Alloys and Fluxed/Non-Fluxed Solders): | Yes |
| RoHS 2 Directive 2011/65/EU: | Yes |



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