CHIPQUIK® NI3300SNL15T3

Datasheet revision 1.0 www.chipquik.com

REH1 Water-Soluble Nickel Solder Paste Sn96.5/Ag3.0/Cu0.5 Two Part Mix 15g (T3)

Product Highlights

2 year shelf life unrefrigerated before mixed
Water-Soluble Solder Paste for Nickel Soldering
Low Temperature Alloy
Higher Activity, Better Wetting

Designed for Hard to Solder Surfaces including Nickel, Nickel Plated Copper and Copper
RoHS 3 and REACH compliant

Specifications

Alloy:	Sn96.5/Ag3.0/Cu0.5
Metal Load:	88% Metal by Weight
Particle Size:	T3 (25-45 µm)
Melting Point:	217-220°C (423-428°F)
Flux Type:	Flux Type: Synthetic Water-Soluble
Flux Classification:	REH1 (Must be cleaned off post-use using Hot Water (60C+), Flux Remover or IPA)
Flux Activation Temperature:	140°C (284°F)
Packaging:	2 compartment bag, includes Jar for after mixed storage, 15g
Shelf Life:	Before Mixed: Refrigerated >24 months, Unrefrigerated >24 months After Mixed: Refrigerated <1 day, Unrefrigerated <1 day. This solder paste is high activity, it is designed to be used after mixing. Once mixed, the high activity does not allow shelf storage.

How to Mix the Two Parts

This product MUST BE MIXED within its bag before use. To mix, squeeze the flux pocket towards the solder powder pocket and the seal between the two compartments will break open, creating a single pocket bag. Then knead the mixture back and forth for 2-3 minutes, or until a uniform consistency is achieved.

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

Before Mixed: Store refrigerated or at room temperature 3-25°C (37-77°F). Do not freeze.
After Mixed: Use same day as mixed. This solder paste is high activity, it is designed to be used after mixing. Once mixed, the high activity does not allow shelf storage.

Once mixed, the solder paste can be dispensed by cutting a small corner off the bag. It can be resealed with a piece of tape, or it can be stored by dispensing the entire bag into the provided empty jar.

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.

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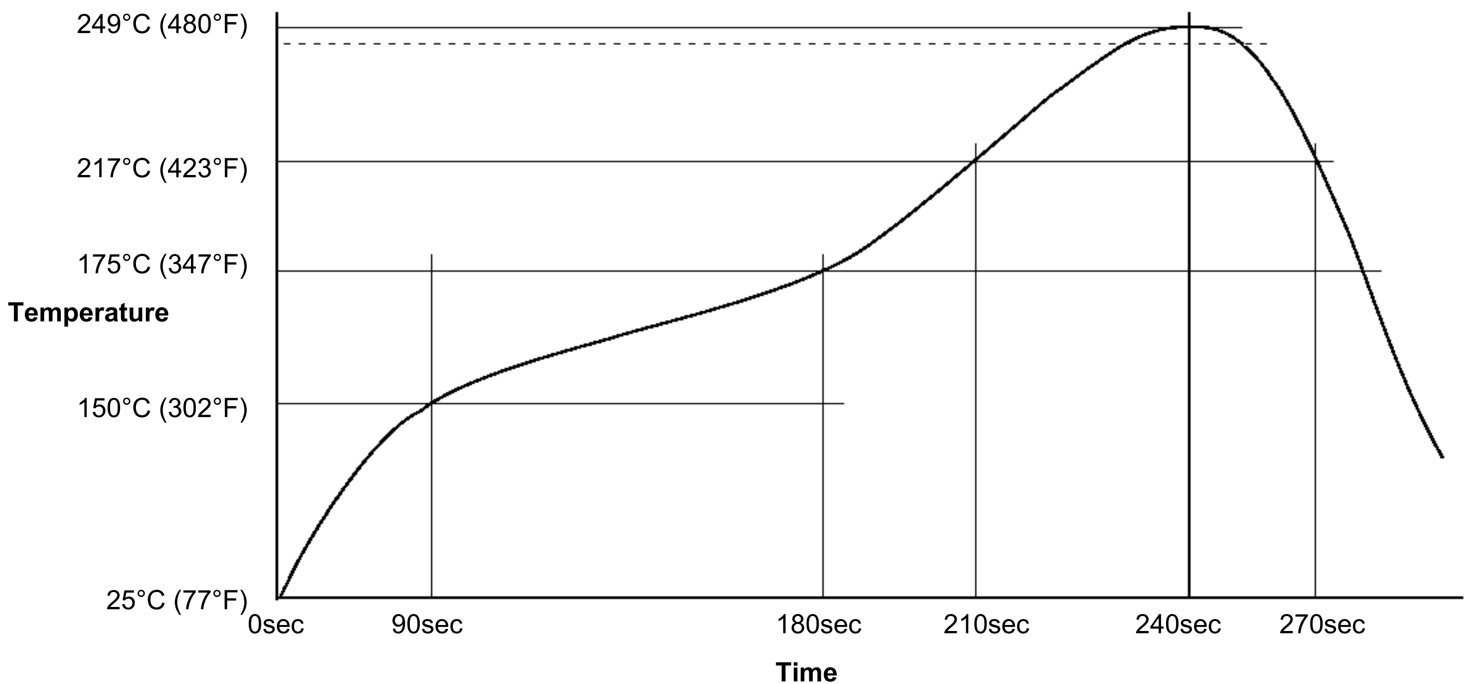
Recommended Profile

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	H: breakthrough
Corrosion	IPC-TM-650: 2.6.15	H: corrosion (uncleaned)
Quantitative Halides	IPC-TM-650: 2.3.28.1	H: ≥ 0.5%
Electrochemical Migration	IPC-TM-650: 2.6.14.1	H: <1 decade drop (cleaned)
Surface Insulation Resistance 85°C, 85% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	H: ≥100MΩ (cleaned)
Tack Value	IPC-TM-650: 2.4.44	40-50g
Viscosity – Malcom @ 10 RPM/25°C ($x10^3$mPa/s)	IPC-TM-650: 2.4.34.4	Print: 125-180, Dispense: 90-130
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 3 Directive (EU) 2015/863:	Yes

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