NC256
Sn95/Sb5

Lead-Free No-Clean Dipping Solder Paste

Features:

- Engineered for Dipping, Pin Transfer or Roller Transfer
- Stable viscosity and tack for consistent volume transfer over time
- Suitable for PoP Assembly/Sphere Attach
- Reduces Voiding Under Micro-BGAs

Description:

NC256 is a type 5 mesh (25um) no-clean solder paste designed for pin transfer, roller transfer, dispensing and dipping applications. NC256 does not string or tail and separates cleanly for uniform transfer from site to site. NC256 has been proven to offer excellent activity and wetting characteristics, superior slump resistance and has shown to reduce voiding on BGAs. NC256 is formulated for long open and abandon time in facilities where the environmental control is not optimal.

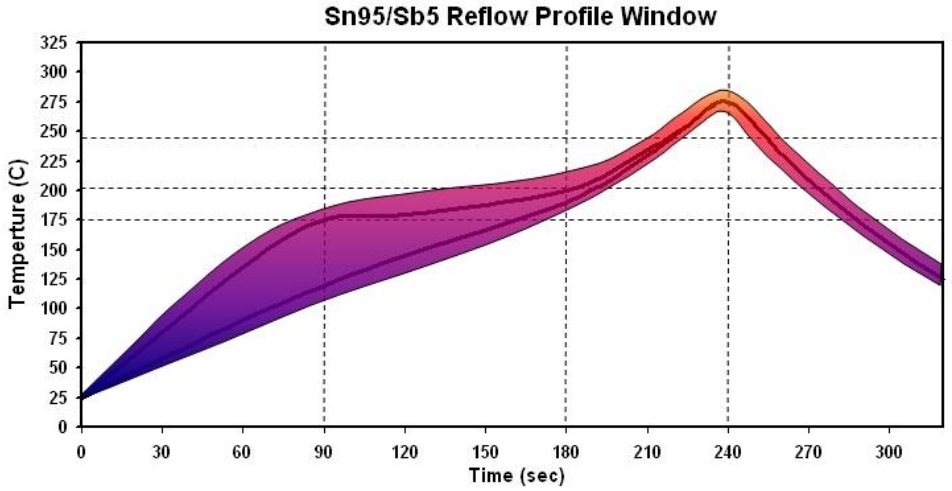
Typical Application:

Standard packaging for NC256 Dipping Flux is EFD 10cc syringes. It can be used with either linear or rotary style controlled volume dipping equipment, pin transfer or dispensed.

When dipping BGA sphere; form a uniform thickness of paste equal to half the thickness of the ball diameter. Dip the BGA into the paste and hold it for at least 0.9 seconds to ensure complete adhesion and transfer to the sphere.

Reflow Profile:

The shaded area defines the process window. Oven efficiency, board size/mass, component type and density all influence the final profile for a given assembly. This profile is a guideline for reference only. Processing boards with thermal-couples attached is recommended to optimize the process.



RATE OF RISE 2°C / SEC MAX	*RAMP TO 150°C (300°F)*	*PROGRESS THROUGH 150°C-175°C (300°F-345°F)*	*TO PEAK TEMP 260°C-265°C (445°F-475°F)*	*TIME ABOVE 240°C (425°F)*	*COOLDOWN ≤ 4 °C / SEC*	*PROFILE LENGTH AMBIENT TO COOL DOWN*
Initial Profile	≤ 75 Sec	30-60 Sec	45-75 Sec	30-60 Sec	45 ± 15 Sec	2.75-3.5 Min

- THE RECOMMENDED REFLOW PROFILE FOR NC256 IS PROVIDED AS A GUIDELINE. OPTIMAL PROFILE MAY DIFFER DUE TO OVEN TYPE, ASSEMBLY LAYOUT, OR OTHER PROCESS VARIABLES. CONTACT AIM TECHNICAL SUPPORT IF YOU REQUIRE ADDITIONAL PROFILING ASSISTANCE.

Cleaning:

- NC256 can be cleaned if necessary with saponified water or an appropriate solvent cleaner.
- Please refer to the AIM cleaner matrix for a list of compatible cleaning materials.

Handling and Storage:

- NC256 has a refrigerated shelf life of 1 year at 4°C - 12°C (40°F - 55°F).
- Allow the solder paste to warm up completely and naturally to ambient temperature (8 hrs.) prior to breaking the seal for use.
- Mix the product lightly and thoroughly (1-2 mins. max) to ensure even distribution of any separated material.
- Do not store new and used paste in the same container, and reseal any opened containers while not in use.
- Replace the internal plug and cap of the 500 gram jars to ensure the best possible seal.

Physical Properties:

ITEM	*SPECIFICATION*
Appearance	Gray, Smooth, Creamy
Alloy	Sn95/Sb5
Melting Point	235°C
Particle Size	T5
General Metal Loading	77%
Viscosity	Dispense
Packaging	Available in all industry standard packaging.

Classification:

PRODUCT NAME	*IPC CLASSIFCATION to J-STD-004*
NC256	ROL0

Surface Insulation Resistance:

REFERENCE	*PROPERTY*	*PASS-FAIL CRITERIA*	*RESULT*
IPC-TM-650 method 2.6.3.3. §5.5.1	Control coupons	>1E9 Ω at 96 and 168 h	Pass
J-STD-004 §3.2.4.5.1	Sample coupons	>1E8 Ω at 96 and 168 h	Pass
IPC-TM-650 method 2.6.3.3. §5.5.2	Post-test visual inspection	No corrosion	Pass

The result of the qualification test indicates that the AIM NC 256 paste flux complies with the requirements of IPC TM-650, Method 2.6.3.3 for Surface Insulation Resistance.

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AIM IS ISO9001:2008 & ISO14001:2004 CERTIFIED