

NC257-2 NO CLEAN SOLDER PASTE

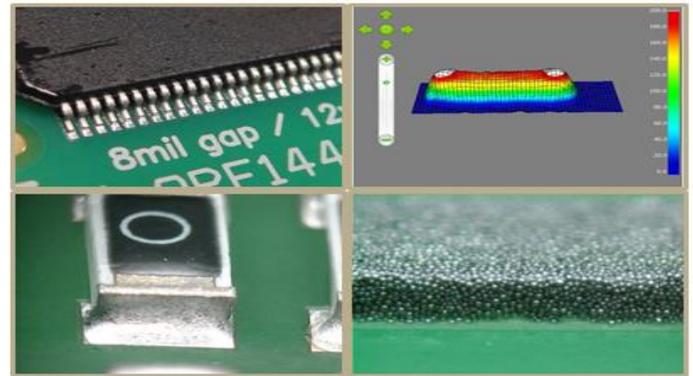
FEATURES

- RoHS Compliant
- Halogen Free
- Reduces Voiding Under Micro-BGAs
- Low Solder Beading
- Excellent Wetting
- Mitigates Head-in-Pillow Defects
- Pin Testable Residues

DESCRIPTION

NC257-2 has been developed to offer extremely broad process windows for printing, wetting and pin-probe testing. NC257-2 produces bright, smooth and shiny solder joints and very clear, low volume post soldering residue. NC257-2 was developed for use in air reflow, but can be used in both N₂ and vapor-phase reflow processes as well. NC257-2 is formulated to extend print performance and tack time in facilities where environmental control is not at its optimum.

CHARACTERISTICS



HANDLING & STORAGE

Alloy	Parameter	Time	Temperature
Lead-Free	Refrigerated Shelf Life	1 year	0°C-12°C (32°F-55°F)
Lead-Free	Unrefrigerated Shelf Life	6 months	< 25°C (< 77°F)
Leaded	Refrigerated Shelf Life	9 months	0°C-12°C (32°F-55°F)
Leaded	Unrefrigerated Shelf Life	4 months	< 25°C (< 77°F)

Do not add used paste to unused paste. Store used paste separately; keep unused paste tightly sealed with internal plug or end cap in place. See AIM's paste handling guidelines for further information. Alloy and storage conditions may affect shelf life. Please refer to NC257-2 Certificate of Analysis for product specific information.

CLEANING

Pre-Reflow: AIM DJAW-10 effectively removes NC257-2 solder paste from stencils while in process. DJAW-10 can be hand applied or used in under stencil wipe equipment. Isopropanol (IPA) is not recommended in process, but may be used as a final stencil rinse.

Post-Reflow Flux Residue: NC257-2 residues can remain on the assembly after reflow and do not require cleaning. Where cleaning is mandated, AIM has worked closely with industry partners to ensure that NC257-2 residues can be effectively removed with common defluxing agents. Contact AIM for cleaning compatibility information.

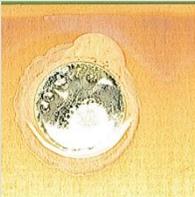
REFLOW PROFILE

Detailed profile information may be found at <http://www.aimsolder.com/reflow-profile-supplements>. Contact AIM for additional information.

PRINTING

Recommended Initial Printer Settings – Dependent on PCB and Pad Design	
Parameter	Recommended Initial Settings
Squeegee Pressure	0.4 - 0.7kg/25mm
Squeegee Speed	13 – 152 mm/second
Snap-off Distance	On Contact 0.00 mm
PCB Separation Distance	0.75 - 2.0 mm
PCB Separation Speed	3 - 20 mm/second

TEST DATA SUMMARY

Name	Test Method	Results	
IPC Flux Classification	J-STD-004	ROLO	
Name	Test Method	Typical Results	Image
Copper Mirror	J-STD-004 3.4.1.1 IPC-TM-650 2.3.32	LOW	
Corrosion	J-STD-004 3.4.1.2 IPC-TM-650 2.6.15	PASS	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Before</p>  </div> <div style="text-align: center;"> <p>After</p>  </div> </div>
Oxygen Bomb Halogen Testing	EN14582:2007 SW 9056 SW 5050	Br 585 mg/Kg Cl < 247 mg/Kg	
Qualitative Halides, Silver Chromate	J-STD-004 3.5.1.1 IPC-TM-650 2.3.33	PASS	
Qualitative Halides, Fluoride Spot	J-STD-004 3.5.1.2 IPC-TM-650 2.3.35.1	PASS	
Surface Insulation Resistance	J-STD-004 3.4.1.4 IPC-TM-650 2.6.3.7	PASS	

TECHNICAL DATA SHEET

Name	Test Method	Typical Results	Image
Electrochemical Migration	J-STD-004 3.4.1.5 IPC-TM-650 2.6.14.1	PASS	
Acid Value Determination	J-STD-004 3.4.2.2 IPC-TM-650 2.3.13	150 mg KOH/ g flux Typical	
Viscosity	J-STD-004 3.4.2.4 IPC-TM-650 2.4.34	500-900 kcps	
Visual	J-STD-004 3.4.2.5	Gray, Smooth, Creamy	
Slump	J-STD-005A 3.6 IPC-TM-650 2.4.35	PASS	
Solder Ball	J-STD-005A 3.7 IPC-TM-650 2.4.43	PASS	
Tack	J-STD-005A 3.8 IPC-TM-650 2.4.44	30 gf Typical	