

## NC258 NO CLEAN SOLDER PASTE

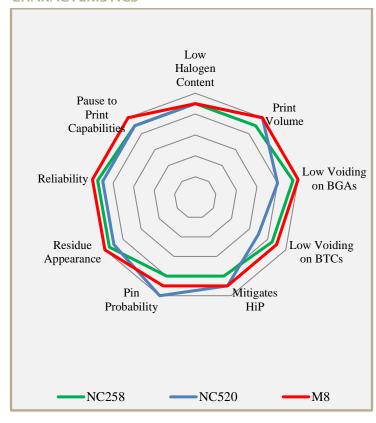
#### **FEATURES**

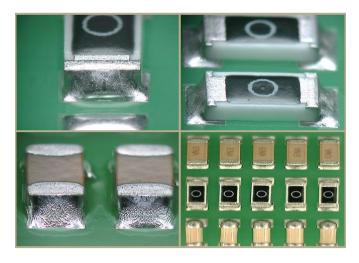
- Long Pause-to-Print Capabilities
- Excellent Wetting, Even Leadless Devices
- Reduces Voiding
- Low Post Process Residues
- RoHS Compliant
- Passes Bono Testing

#### **DESCRIPTION**

NC258 has been developed to offer long pause-to-print capabilities while enhancing fine print definitions. NC258 reduces voiding. The superior wetting ability of NC258 results in bright, smooth and shiny solder joints. It also offers very low post process residues, which remain crystal clear even at the elevated temperatures required for today's lead-free alloys.

#### **CHARACTERISTICS**





#### **HANDLING & STORAGE**

Parameter	Time	Temperature
Refrigerated Shelf Life	1 year	0°C-12°C (32°F-55°F)
Unrefrigerated Shelf Life	3 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 NC258 Certificate of Analysis for product specific information.

#### **CLEANING**

Pre-Reflow: AIM DJAW-10 effectively removes NC258 solder paste from stencils while in process. DJAW-10 can be hand applied or used in under stencil wipe equipment. DJAW-10 will not dry NC258 and will enhance transfer properties. Do not over-apply DJAW-10. Do not apply DJAW-10 to stencil topside. Isopropanol (IPA) is not recommended in process, but may be used as a final stencil rinse.

Post-Reflow Flux Residue: NC258 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 NC258 residues can be effectively removed with common defluxing agents. Contact AIM for cleaning compatibility information.

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#### **REFLOW PROFILE**

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

### **PRINTING**

Recommended Initial Printer Settings - Dependent on PCB and Pad Design			
Parameter	Recommended Initial Settings		
Squeegee Pressure	0.9 – 1.5 lbs/inch of blade		
Squeegee Speed	0.5 – 6 inches/second		
Snap-off Distance	On Contact 0.00mm (0.00'')		
PCB Separation Distance	0.75 – 2.0mm (.038080'')		
PCB Separation Speed	3.0 – 20.00 mm/second		

#### **TEST DATA SUMMARY**

Name	Test Method	Results	
IPC Flux Classification	J-STD-004	ROL0	
IPC Flux Classification	J-STD-004B 3.3.1	ROL1	
Name	Test Method	Typical Image Results	
Copper Mirror	J-STD-004B 3.4.1.1 IPC-TM-650 2.3.32	LOW	SACIRO VEZIO
Corrosion	J-STD-004B 3.4.1.2 IPC-TM-650 2.6.15	PASS	Before After  White the second

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Name	Test Method	Typical Results	Image
Quantitative Halides, Chloride, Bromide	J-STD-004 3.2.4.3.1 IPC-TM-650 2.3.35 or 28	Br: 0.33% Cl: 0%	
Qualitative Halides, Silver Chromate	J-STD-004B 3.5.1.1 IPC-TM-650 2.3.33	PASS	
Qualitative Halides, Fluoride Spot	J-STD-004B 3.5.1.2 IPC-TM-650 2.3.35.1	No Fluoride	
Surface Insulation Resistance	J-STD-004B 3.4.1.4 IPC-TM-650 2.6.3.7	PASS See Aim Qualification Test Report #NC258052510	
Bono Testing		PASS Fc<8.0 Typical	
Oxygen Bomb Halogen Testing	EN14582:2007 SW 9056 SW 5050	Br <50.1 mg/Kg Cl <125 mg/Kg	
Electrochemical Migration	J-STD-004B 3.4.1.5 IPC-TM-650 2.6.14.1	PASS	
Flux Solids, Nonvolatile Determination	J-STD-004B 3.4.2.1 IPC-TM-650 2.3.34	99.9% Typical	
Acid Value Determination	J-STD-004B 3.4.2.2 IPC-TM-650 2.3.13	145 +/- 6mg KOH/g Flux Typical	
Flux Specific Gravity Determination	J-STD-004B 3.4.2.3 ASTM D-1298	0.92 Typical	
Viscosity	J-STD-005A 3.5.1 IPC-TM-650 2.4.34	600-900 depending on metal load and particle size	
Visual	J-STD-004B 3.4.2.5	PASS	

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Name	Test Method	Typical Results	lmage
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	15Min 4Hr
Tack	J-STD-005A 3.8 IPC-TM-650 2.4.44	37.9g Typical	SAC305 NC258  60.00  60.00  70 T1 T3 T4 T5 T6 T7 T8  Time (hour)
Wetting	J-STD-005A 3.9 IPC-TM-650 2.4.45	PASS	

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# AIM Solder:

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