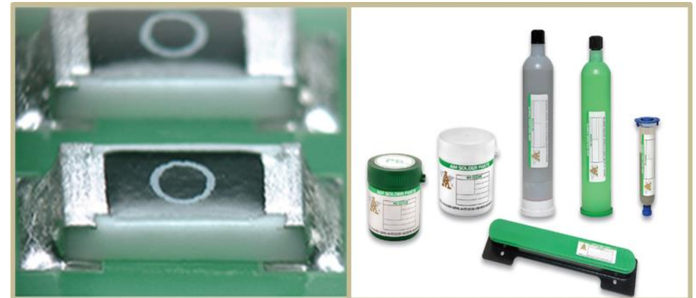
Solder plus Support

NC254 NO CLEAN SOLDER PASTE

FEATURES

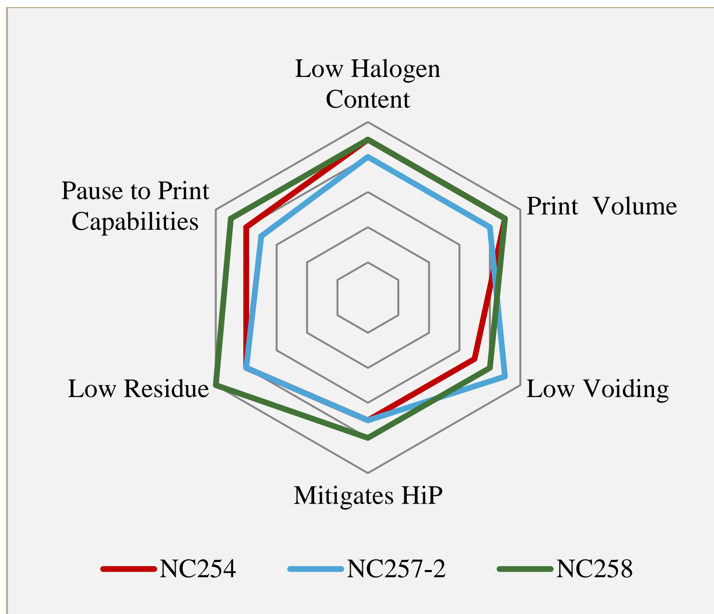
- Broad Processing Window
- Clear Pin-Probe Testable Residue
- Halide-Free
- Excellent Wetting, Even Leadless Devices
- Reduces Voiding Under Micro-BGAs
- 24 Hour Stencil Life
- 12-14 Hour Tack Time



DESCRIPTION

NC254 has been developed to offer extremely broad process windows for printing, wetting and pin probe testing. The superior wetting ability of NC254 results in bright, smooth, shiny, solder joints. NC254 offers very low post process residues, which remain crystal clear and probable at elevated temperatures. NC254 has shown to reduce or eliminate voiding on micro-BGAs. Slump and humidity tolerances found in NC254 extend the solder paste's useable life in facilities where environmental control is not at its optimum.

CHARACTERISTICS



HANDLING & STORAGE

Alloy	Parameter	Time	Temperature
Lead-Free	Refrigerated Shelf Life	9 Months	0°C-12°C (32°F-55°F)
Lead-Free	Unrefrigerated Shelf Life	4 Months	< 25°C (< 77°F)
Leaded	Refrigerated Shelf Life	12 Months	0°C-12°C (32°F-55°F)
Leaded	Unrefrigerated Shelf Life	N/A	N/A

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.

CLEANING

Pre-Reflow: AIM DJAW-10 solvent effectively removes NC254 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 NC254 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: NC254 residues do not require cleaning. AIM has worked closely with industry partners to ensure that NC254 residues can be effectively removed with common defluxing agents. Contact AIM for cleaning compatibility information.

DISCLAIMER The information contained herein is based on data considered accurate and is offered at no charge. Product information is based upon the assumption of proper handling and operating conditions. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated. Please refer to http://www.aimsolder.com/terms-conditions to review AIM's terms and conditions.

WWW.AIMSOLDER.COM INFO@AIMSOLDER.COM
USA +1 401-463-5605 CANADA +1 514-494-2000 MEXICO +52 656-630-0032 ASIA +86 755-2993-6487 EUROPE +48 42-663-60-04

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	0.10 -0.30 kg/cm (.6 -1.7 lbs/in.) of blade
Squeegee Speed	25-50 mm/sec. (1-2 in./sec.)
Snap-off Distance	On Contact 0.00 mm
PCB Separation Distance	0.75 - 2.0 mm
PCB Separation Speed	Slow

TEST DATA SUMMARY

Name	Test Method	Results	
IPC Flux Classification	J-STD-004	ROL0	
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	
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	No Fluoride	
Surface Insulation Resistance	J-STD-004 3.4.1.4 IPC-TM-650 2.6.3.3	PASS	Test data available on request
Electrochemical Migration	J-STD-004 3.4.1.5 IPC-TM-650 2.6.14.1 GR-78-CORE	PASS	Test data available on request
Flux Solids, Nonvolatile Determination	J-STD-004 3.4.2.1 IPC-TM-650 2.3.34	96.7% Typical	
Acid Value Determination	J-STD-004 3.4.2.2 IPC-TM-650 2.3.13	114 mg KOH/g flux Typical	

DISCLAIMER The information contained herein is based on data considered accurate and is offered at no charge. Product information is based upon the assumption of proper handling and operating conditions. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated. Please refer to **http://www.aimsolder.com/terms-conditions** to review AIM's terms and conditions.

WWW.AIMSOLDER.COM INFO@AIMSOLDER.COM
USA +1 401-463-5605 CANADA +1 514-494-2000 MEXICO +52 656-630-0032 ASIA +86 755-2993-6487 EUROPE +48 42-663-60-04

Name	Test Method	Typical Results	Image
Viscosity	J-STD-004 3.4.2.4 IPC-TM-650 2.4.34	300-900 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	34.2 gf Typical	

DISCLAIMER The information contained herein is based on data considered accurate and is offered at no charge. Product information is based upon the assumption of proper handling and operating conditions. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated. Please refer to http://www.aimsolder.com/terms-conditions to review AIM's terms and conditions.

WWW.AIMSOLDER.COM INFO@AIMSOLDER.COM
USA +1 401-463-5605 CANADA +1 514-494-2000 MEXICO +52 656-630-0032 ASIA +86 755-2993-6487 EUROPE +48 42-663-60-04