

ALPHA[®] NC250

Rosin Based, Mildly Activated Low Residue Flux

DESCRIPTION

ALPHA NC250 flux is an organic activated, low residue soldering flux, which is specially designed for wave soldering conventional and surface mount assemblies. These low solid fluxes leave a non-tacky surface with residues that do not interfere with pin testing.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

The high surface insulation resistance of flux residues which allows it as no-clean flux in many applications. Residues are safe to leave on boards; very low quantity of residual flux is left on boards as a very thin film which is hardly visible to the naked eye and presents no problem to pin testing. Fast drying residues are non-tacky.

In general, free of solder ball after soldering. If solder balls exist, these can be easily removed by brushing. ALPHA NC250 is a specially designed soldering flux of high solderability and can help to reduce bridging.

APPLICATION GUIDELINES

ALPHA NC250 flux can be applied by foam, wave, or spray fluxing equipment. Best results can be obtained by following these guidelines:

Keep foam head, wave height, or sprayed volume consistent through appropriate adjustments. Replace flux daily if self-contained storage is not available. Add fresh flux to maintain the appropriate liquid level. The degree of preheat is dependent on many variables such as conveyor speed, type of components and substrates. Entering the solder wave with a top-side temperature of 190 to 240 °F (88 to 115 °C) and a bottom-side temperature of 250 to 325 °F (121 to 163 °C) is typical. For cleaning of foam stone and thinning the flux, use ALPHA 425 Thinner.

TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Clear, pale yellow liquid	Flash Point (T.C.C.)	12 °C
Solids Content, %wt/wt	6.3	Recommended Thinner	ALPHA 425
Specific Gravity @ 25 °C (77 °F)	0.800 ± 0.005	Shelf Life (from Date of Mfg.)	540 Days
Acid Number (mg KOH/g)	23.2 ± 2.5	IPC J-STD-004 Designation	ROL0

CORROSION & ELECTRICAL TESTING

Test	Results
Silver Chromate Paper	PASS
Copper Mirror Test	PASS
Surface Insulation Resistance	6.3 x 10 ¹⁰ Ω (after 532 hours)
Test Coupon: JIS Type 2	
Thermal Treatment: Apply 0.05ml of flux, then heat to 100 °C for 3 minutes	
Test Conditions: 85 °C, 85%RH, -48V DC (bias voltage), 100V DC (test voltage)	
Test Equipment: Sirometer, Model 300	

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at MacDermidAlpha.com/assembly-solutions/knowledge-base.**

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
 Assembly@MacDermidAlpha.com
www.macdermidalpha.com**

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. **READ IT THOROUGHLY PRIOR TO PRODUCT USE** . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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