

ALPHA NF3000

Water-Soluble Flux

DESCRIPTION

ALPHA NF3000 is a water-soluble liquid soldering flux principally designed for wave soldering of printed circuit boards. The organic activating system in **ALPHA NF3000** has a neutral pH at room temperature and becomes activated with elevated temperatures during the soldering process. This flux was developed to operate under a whole thermal window while emitting little smoke and odor.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

Features

- ALPHA NF3000 contains a unique blend of solvents, activators, rosins, surfactants and other ingredients

Benefits

- ALPHA NF3000 exhibits excellent soldering performance using a variety of SnPb and Pb-free alloys
- ALPHA NF3000 is a cleanable, water-soluble flux with no white residue after cleaning

APPLICATION GUIDELINES

Primarily for foam application and conveyORIZED soldering, ALPHA NF3000 can be spray, dip wave or brush - applied. Flux applicators and reservoir should be plastic or titanium only.

Flux-coated surfaces should be preheated to provide optimum wicking and solder joint formation. A typical assembly would be preheated between 85 °C and 95 °C on the topside prior to entering the wave.

The foam applications should be supplied with compressed air which is filters to be free of contaminant oil and water. The flux level should be maintained sufficiently above the aerator stone to produce adequate foam height. Air pressure should be adjusted to produce optimum height with foam consisting of small uniform bubbles.

During use, the specific gravity of the flux should be checked periodically with a hydrometer. Evaporated solvent should be replenished with the addition of flux thinner. For consistent

soldering performance, the flux should be replaced periodically. During this change-out, the aerator stone should be thoroughly cleaned with flux thinner.

After soldering, ALPHA NF3000 residues must be removed. Removal can be accomplished by multizone conveyORIZED in-line spray systems, automated batch spray systems or multi-zone batch tank cleaning. To avoid the risk of corrosion, residues should be thoroughly cleaned, preferably, immediately or not beyond four hours after processing.

TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Clear, Pale Yellow	pH, 5% v/v aqueous solution	7.0
Solids Content, wt/wt	20.0%	Recommended Thinner	ALPHA 425
Specific Gravity @ 25 °C (77 °F)	0.845 +/- 0.005	Shelf Life	720 days
% Chloride	2.2 +/- 0.3	IPC J-STD-004(B) Designation	ORH1
Flash Point (T.C.C.)	13.4°C	Packaging Size	1, 5 and 55 gallon

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
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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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