

ALPHA[®] A86-20

Mildly Activated Rosin Flux

DESCRIPTION

ALPHA A86-20 Flux is a rapid, high-rising, foam flux requiring low air pressures for a constant, adjustable head of fine bubble foam. It is a homogeneous solution of pure, water-white rosin a blend of purified solvents to which has been added a small amount of an extremely effective activating agent. **ALPHA A86-20** is specially formulated to maintain its foaming, fluxing and wetting properties during continuous exposure to aeration. The material stability is such that the characteristics of the flux are not changed due to evaporation losses during the average working day. In addition, this flux is particularly suitable for assemblies where there is a requirement of big solder fillets to facilitate better anchorage of large or heavy components.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

ALPHA A86-20 contains P.C. Rosin - the finest grade of water-white rosin which has been specially processed by Alpha to remove undesirable materials without altering the chemical composition of the rosin. In addition to producing a purer rosin which provides increased flux clarity, lighter flux color and greater performance consistency, the use of P.C Rosin in the manufacture of this flux eliminates the problem of crystallization and simplifies total flux residue removal operations.

APPLICATION

ALPHA A86-20 was specially designed for foam fluxing of printed circuits and other electronic assemblies. However, other methods such as Brush, Dip, wave, etc can also be applied. The high solids content of this flux ensures adequate flux coverage and protection of boards during soldering, even at high temperature and extended soldering times. It's instant wetting and excellent capillary properties, insure satisfactory performance. This flux is suitable for use with the following metallic surfaces:

Brass	Bronze	Cadmium (Plate)	Copper
Lead	Nickel (Plate)	Silver	Solder (Plate)
Solder (Hot Dip)	Terne (Plate)	Tin (Hot Dip)	Tin (Plate)

Residue Removal: The flux residue of ALPHA A86-20 is highly resistant to corrosion and provides good electrical insulation characteristics. For critical electronic equipment, it is recommended that the residue be removed with chlorinated solvents such as ALPHA 564 or ALPHA 565. However, milder, fluorinated solvents, like Freons will also remove the residue effectively.

Thinning: The solids content of these fluxes should be maintained by the addition of thinner to compensate for evaporation losses. In general, it is recommended that the solids content not be allowed to increase by more than 5% before the addition of thinner. Only ALPHA 425 Thinner should be used for this purpose, to ensure consistency of flux foaming and soldering characteristics. Flux solids content is readily controlled by simple hydrometer measurement in conjunction with the graph shown below.

TECHNICAL DATA

Item	Typical Values	Item	Typical Values
Appearance	Clear amber liquid	Flash Point (T.C.C.)	61 °F (16.1 °C)
Solids Content, wt/wt	20%	Pounds per Gallon@ 25 °C	7.15
Specific Gravity @ 25 °C (77 °F)	0.840 ± 0.005	Shelf Life (from Date of Mfg.)	720 days
% Halide, wt/wt	0.33 ± 0.03	Surface Insulation Resistance Test, ohm	10 ¹¹ minimum*
Packaging Size	1, 5 and 55 gallons	*FR-4 comb pattern test boards (0.025" lines, 0.050" spacings), after 28 days at 35 °C, 90% R.H., with 50VDC basis 100 VDC test.	

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

<p>North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460</p>	<p>Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p>Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100</p>
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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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