

# ALPHA<sup>®</sup> 809

## Liquid Activated Rosin Flux

### DESCRIPTION

**ALPHA 809** Flux is a rapid, high-rising, foam flux requiring low air pressures for a constant, adjustable head of fine bubble foam. It is a stable, homogeneous solution of pure, water-white rosin in a multi-component solvent; to which has been added a small amount of a very effective activating agent with a long, trouble-free, industrial history. The material is so formulated as to maintain its foaming, fluxing and wetting properties during the continuous exposure to a very low level. The material stability is such that the characteristics of the flux are not changed due to evaporation losses during the average working day. The unique composition of this flux gives a steady foam head which does not break when it comes in contact with hot surfaces, making pallet and fixture cooling unnecessary.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### PRODUCT INFORMATION

ALPHA 809 Flux contains P.C. Rosin – the finest grade of water-white rosin which has been specifically 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 GUIDELINES

**Flux Application:** This flux was specifically designed for foam fluxing of printed circuits and other electronic assemblies. Its instant wetting and excellent capillary properties, together with the small flux residues after soldering, are very advantageous.

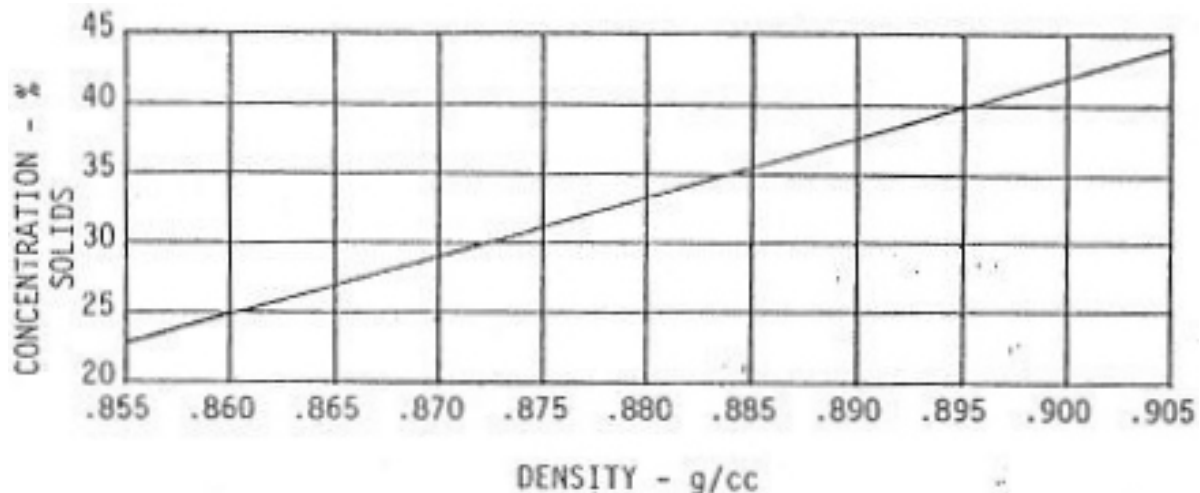
ALPHA 809 is suitable for use with the following metallic surfaces:

Brass	Bronze	Cadmium (Plate)	Copper
Lead	Nickel (Plate)	Silver	Solder (Plate)
Terne Plate	Tin (Hot Dipped)	Tin (Plate)	Tin-Zinc (Plate)

**Residue Removal:** This flux was specifically designed for foam fluxing of printed circuits and other electronic assemblies. Its instant wetting and excellent capillary properties, together with

the small flux residues after soldering, are very advantageous. If removal of the flux residue is desired, it may be accomplished by the use of alcohol, carbon tetrachloride, etc.

**Thinning:** In order to maintain the foaming properties of this flux, only ALPHA 810 Thinner should be used to compensate for evaporation losses. The flux should be restored to its original composition by the addition of this specially formulated thinner until the proper density is obtained. For this purpose, a simple hydrometer should be used in conjunction with the graph shown below:



**Application Guidelines:** Because of the variety of foam-fluxing equipment available, no uniform instructions are possible. However, optimum conditions can generally be obtained by following these simple rules:

1. Keep air pressure low. Too little pressure will cause a slow rise and too high a pressure will lower the foam head. Make sure air lines contain traps to remove moisture and oils which may change the properties.
2. Evaporation losses are quite low. These losses should be compensated for by using ALPHA 810 Thinner until the right density of 0.860 g/cc (at 77 °F) is obtained. This adjustment can be done once a day.
3. The flux level over the stone should be maintained by adding ALPHA 809 Flux to compensate for the material "drag-out". A simple siphon arrangement is adequate.
4. The foam-fluxing equipment should be cleaned periodically to remove clippings and debris. The stone can be cleaned in ALPHA 810 Thinner when required.

**TECHNICAL DATA**

Item	Typical Values	Item	Typical Values
Appearance	Clear Amber Liquid	Flash Point (T.C.C.)	12 °C (53.6 °F)
Solids Content, %wt/wt	25	Recommended Thinner	<b>ALPHA 810</b>
Density @ 25 °C (77 °F)	0.860 ± 0.005 g/cc	Shelf Life (from Date of Mfg.)	1080 Days
Free Acidity	None	IPC J-STD-004 Designation	ROM1
Surface Tension @ 25 °C (77 °F)	25.6 dyn/cm	Packaging Size	1, 5, 55 Gallons
Water Extract Resistivity	37,000 ohm-cm	Fungus Resistance	Per MIL-E-5272C

**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](http://MacDermidAlpha.com/assembly-solutions/knowledge-base).**

**CONTACT INFORMATION**

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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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