ALPHA® 870-25, 871-25A

Water Soluble Resin Fluxes

DESCRIPTION

ALPHA 870-25 is an intermediate activity flux based on a water soluble resin and does not contain organic acid activators. **ALPHA 871-25A** contains both halide and organic acid activation and is considerably more active. All the fluxes can be effectively cleaned with plain water.

The base resin is a derivative of rosin, but unlike rosin, does not have any of the inherent fluxing capabilities of rosin, nor does it dry to hard, encapsulating residues, as does rosin.

The water extract pH of these fluxes is higher, in general, than that of organic fluxes. For the **ALPHA 870 Flux Series**, it is neutral.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

APPLICATION GUIDELINES

These fluxes are recommended for mass soldering applications where traditional organic water soluble fluxes are considered too corrosive. They have excellent characteristics for foam application and can also be applied by wave, spray dip or brush techniques.

ALPHA 870-25 - 25% solids. Contains only organic chloride activator. The IPC-J-STD-004 Classification is ORH1.

ALPHA 871-25A - 25% solids. Contain both organic acid and organic chloride activators, providing a higher level of fluxing activity than ALPHA 870-25. The IPC-J-STD-004 Classification is ORH1.

All of these fluxes are suitable for soldering to the following metals, provided the surfaces to be soldered are not excessively tarnished:

Cadmium (Plate)	Platinum	Terne (Plate)
Copper	Silver	Tin (Hot Dipped)
Gold	Solder (Plate)	Tin (Plate)
Palladium		

Residue Removal: The residues of ALPHA 870-25 and ALPHA 871-25A are easily removed with hot water cleaning and there is a minimum amount of foaming during residue removal. Disposal of water washing effluents presents no problems, since they are biodegradable. However, pH adjustment and pretreatment to remove dissolved lead may be necessary. If desired, ALPHA 2444 Rinse Aid can be used.

TECHNICAL DATA

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. To ensure consistency of flux foaming and soldering characteristics, only ALPHA 425 thinner should be used for this purpose on the ALPHA 870-25 and ALPHA 871-25A fluxes.

PHYSICAL PROPERTIES

Category	Typical Values	
	870-25	871-25A
Specific Gravity @ 25 °C (77 °F)	0.846	0.886
Lb./Gal. @ 25 °C (77 °F)	7.0	7.4
Percent Solids	25	25
Water Extract Resistivity (ohm-cm)	25,000	5,200
pH (5% Sol.)	7.0	5.2
Flash Point (TCC)	17 °C (62 °F)	
Recommended Thinner	ALPHA 425 Thinner	

***ALPHA 870-25** has a shelf life of 540 days from the date of manufacturing.

AVAILABILITY

ALPHA 870-25 and ALPHA 871-25A are available in 1, 5 and 55 gallon containers.

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

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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