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ALPHA® EF-2100

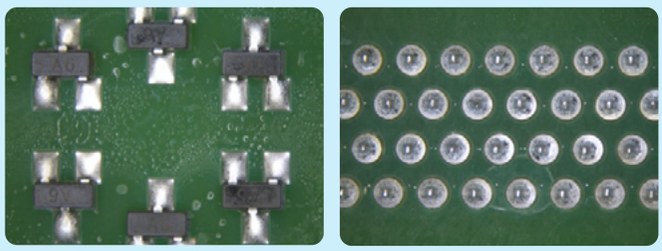
VOC-Free, Reach-Compliant, Low Solids No-Clean Wave Soldering Flux

The latest VOC-Free Flux designed to meet current REACH and RoHS legislation.

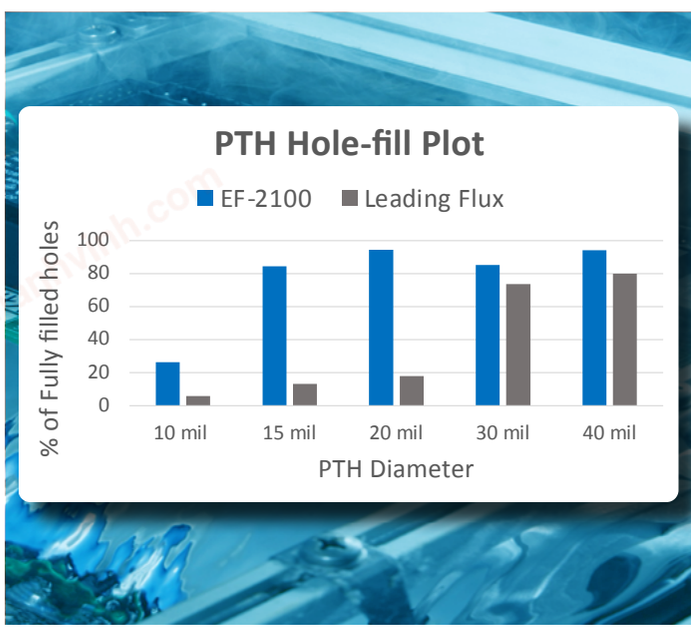
ALPHA EF-2100 provides the highest activity of any VOC-free Bellcore SIR compliant flux for defect-free soldering. This flux is formulated as a direct replacement for ALPHA EF-2210, ALPHA EF-2202, ALPHA WB-400 & ALPHA NR-300.

ALPHA EF-2100's proprietary organic activators deliver excellent wetting and top-side hole-fill, even with OSP coated bare copper boards which have undergone prior thermal excursions. They also act to reduce the surface tension between the solder mask and the solder, dramatically reducing the tendency of solder ball generation. The formulation of ALPHA EF-2100 is designed to be more thermally stable; thereby, reducing the occurrence of solder bridging.

Excellent Solderability & Flux Residue Appearance

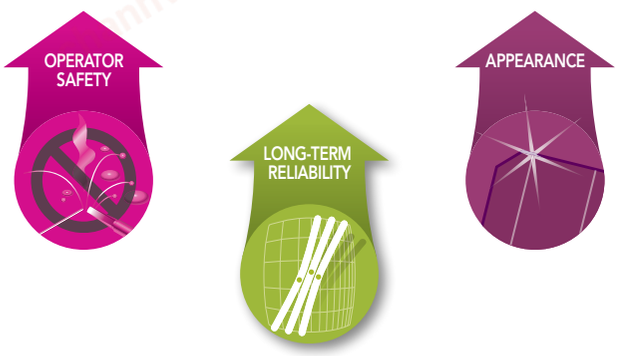


Between SOTs | Connectors



KEY FEATURES

- VOC-Free
- Reach & RoHS Compliant
- Halide-Free
- Zero Rosin
- Low Solids
- No-Clean Chemistry
- Bellcore SIR Compliant



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ALPHA® EF-2100

VOC-Free, Reach-Compliant, Low Solids No-Clean Wave Soldering Flux

TECHNICAL SPECIFICATIONS

PHYSICAL PROPERTIES	TYPICAL VALUES	PARAMETERS / TEST METHOD	TYPICAL VALUES
Appearance	Clear, Colorless Liquid	pH, as is	2.2
Solids Content, wt/wt	4.0	Recommended Thinner	DI Water
Specific Gravity @ 25°C (77°F)	1.015 ± 0.003	Shelf Life	18 months
Acid Number (mg KOH/g)	31.5 ± 2.0	VOC Content	< 1%
Flash Point (T.C.C.)	None	IPC J-STD-004 Designation	ORL0

PROCESSING PARAMETERS

OPERATING PARAMETERS	TYPICAL LEVEL
Amount of Flux Applied	Spray: <2000 µg/in^2 of solids
Top-Side Preheat Temperature	95 - 115 °C (203 - 240 °F)
Bottom-Side Preheat Temperature	0 to +22 °C (0 - 70 °F) vs. Top-Side
Recommended Preheat Profile	Straight ramp to desired top-side temperature
Maximum Ramp Rate of Topside Temperature (to avoid component damage)	2 °C/second (3.5 °F/second) maximum
Contact Time in the Solder (includes Chip Wave and Primary Wave)	2 - 7 seconds (3 - 5 seconds most common)
SOLDER POT TEMPERATURE	
Sn63/Pb37 Alloy	235 - 260 °C (460 - 500 °F)
Lead-Free Alloys (99.3Sn/0.7Cu, 96.5/3.5Ag, SAC305, SAC405, SnCX and SACX)	260 - 270 °C (500 - 520 °F)

These are general guidelines which have proven to yield excellent results; however, depending upon your equipment, components, and circuit boards, your optimal settings may be different. In order to optimize your process, it is recommended to perform a design experiment, optimizing the most important variables (amount of flux applied, conveyor speed, topside preheat temperature, solder pot temperature and board orientation).



SCAN THE CODE
to know more

MacDermid Alpha ELECTRONICS SOLUTIONS

macdermidalpha.com
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Alpha is a product brand of MacDermid Alpha Electronics Solutions.

For more information, contact us at Assembly@MacDermidAlpha.com

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