

837LFWS



Lead-Free, Water Soluble Flux

837LFWS is a neutral pH at room temperature that becomes highly activated at soldering temperatures. Post-soldering flux residues must be cleaned, but are easily removed with water.

This water soluble liquid flux is designed for wave soldering, surface mount assembly, and through-hole applications. It may be applied by spray, foam, or wave fluxing.

In liquid format, we also offer rosin-based flux, no-clean, halogen-free flux, and lead-free no-clean flux.

For paste flux, visit MG Chemicals' 8341 and 8342.

Features & Benefits

Water-soluble flux for soldering

Meets IPC J-STD-004B type ORH1

For both leaded and lead-free solders

Excellent wetting and through-hole fill

Residues are easily removed with water

RoHS-compliant and VOC-free



Available Packaging

Part #	Packaging	Net Vol.	Net Wt.
837LFWS-1L	Bottle	1 L	846 g

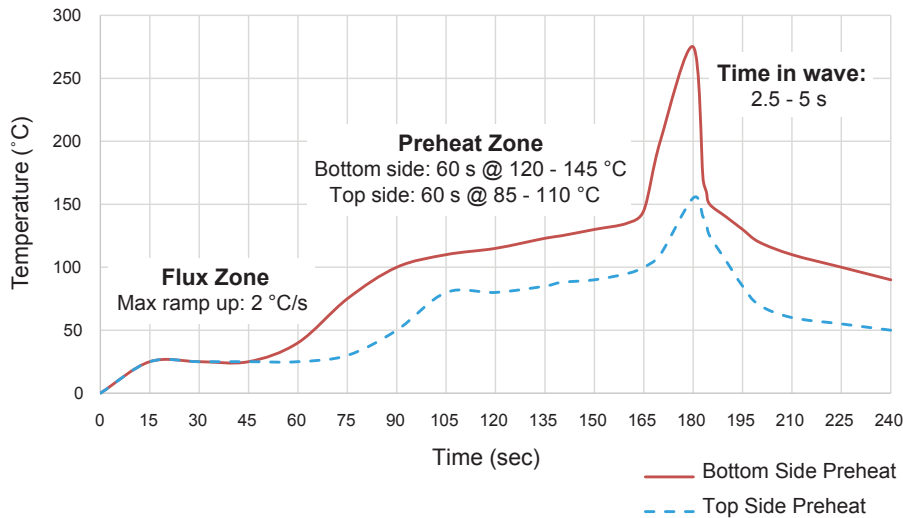
Storage and Handling

Store between 18 and 27 °C in a dry area, away from sunlight (see SDS).

Properties

Color	Colorless	Visual
Solids %	18%	IPC-TM-650 2.3.34
Density	0.9 g/mL	ASTM D4212
Flux Classification	ORH1	J-STD-004B, MIL-F-14256F
Flux Type	Organic	J-STD-004B
Flux Activity	High	J-STD-004B
Copper Mirror	Complete removal	IPC-TM-650 2.3.32
Cleaning Requirements	Required	—
Halides (by weight)	2.2%	J-STD-004B
Surface Insulation Resistance (SIR)	1.8 x 10 ¹⁰ Ω	IPC-TM-650 2.6.3.3
Shelf Life	2 y	—

Typical Lead-Free Wave Solder Profile



Application Instructions

Read the product SDS for more detailed instructions before using this product.

1. Apply flux on the surface by dip, spray, foam, or brush application.
2. Clean residue with MG 413B, 413C, 4140, 4050A, or 4140A flux removers.

Foam Flux

- The foam fluxer should be provided with the compressed air
- Flux tank must be always full
- Surface of the flux should be 0.5–1" above the top of the flux aerator or flux stone
- Adjust pressure to optimize foam height with a fine uniform foam head
- After fluxing, use an air knife to remove excess flux from the machine

To check for uniformity of spray flux coating, run a tempered glass plate provided by the machine manufacturer through the flux and preheat zones. Ensure to inspect the glass before the wave zone.

Wave Solder Operating Parameters

Amount of Flux	
Foam	1 000–2 000 µg/in ² solids
Spray	750–1 500 µg/in ² solids
Foam Fluxing Parameters	
Foam Stone Pore Size	20–50 µm
Flux Level Above Stone	25–40 mm
Chimney Opening	10–13 mm
Air Pressure	1–2 lb/in ²
Top Side Preheat Temp.	85–110 °C
Bottom Side Preheat Temp.	35 °C
Conveyor-speed	1.2–2.8 m/min
Contact Time in Solder	2.5–4.5 s
Solder Pot Temp.	
Sn96.5/Ag3.5	260–276 °C
Sn95/Ag5	280–296 °C
Sn99.3/Cu0.7	265–276 °C
SnAgCu	271–276 °C
Sn95/Sb5	280–296 °C

Disclaimer: This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.