

No-Clean, Halogen-Free Flux

8351 is a organic liquid solder flux with low activity. It has a low solids content that leaves virtually no residue. Solder joints appear shiny after soldering, even without cleaning.

This halogen free flux is the best soldering flux for wave soldering and surface mount assembly. It may be applied by spray or foam, or by wave fluxing. It is also re-flowable in air or nitrogen.

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

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



Features & Benefits

Halogen-free flux

No-clean flux

Excellent wettability

Can be used with both lead-free and leaded alloys

Rosin/resin-free

Meets J-STD-004B

RoHS-compliant

Storage and Handling

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

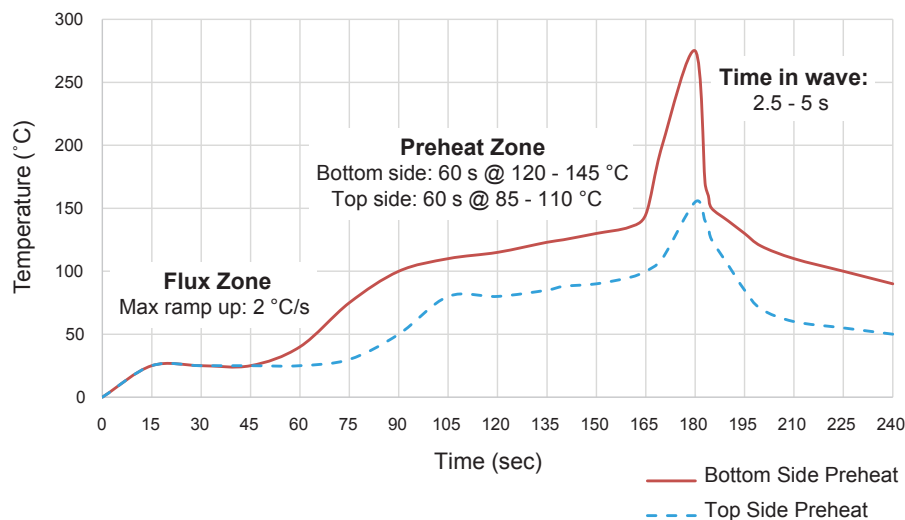
Properties

Color	Colorless	Visual
Solids %	1.9–2.5%	—
Density	0.8 g/mL	—
Flux Classification	ORLO	J-STD-004B, MIL-F-14256F
Flux Type	Organic	J-STD-004B
Flux Activity	Low	J-STD-004B
Copper Mirror	Pass	IPC-TM-650 2.3.32
Cleaning Requirements	Recommended	—
Halides (by weight)	<0.5%	J-STD-004B
Surface Insulation Resistance (SIR)	2.1 x 10 ⁹ Ω	IPC-TM-650 2.6.3.3
Acid Number (mg KOH/g)	14–16	Titration
Shelf Life	5 y	—

Available Packaging

Part #	Packaging	Net Vol.	Net Wt.
8351-125ML	Bottle	125 mL	101 g
8351-1L	Bottle	945 mL	764 g
8351-4L	Jug	4 L	3.23 kg
8351-20L	Pail	20 L	16.1 kg

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.