

# 8351



## No-Clean Halogen-Free Flux

8351 is an 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
- Excellent wettability
- Can be used with both lead-free and leaded alloys
- Rosin/resin-free
- Meets J-STD-004B
- RoHS-compliant

## Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
8351-125ML	Bottle	125 mL	101 g
8351-1L	Bottle	1 L	809 g
8351-4L	Jug	4 L	3.23 kg
8351-20L	Pail	20 L	16.1 g

## Contact Information

MG Chemicals, 1210 Corporate Drive  
Burlington, Ontario, Canada L7L 5R6

Email: [support@mgchemicals.com](mailto:support@mgchemicals.com)

Phone: North America: +(1)800-340-0772

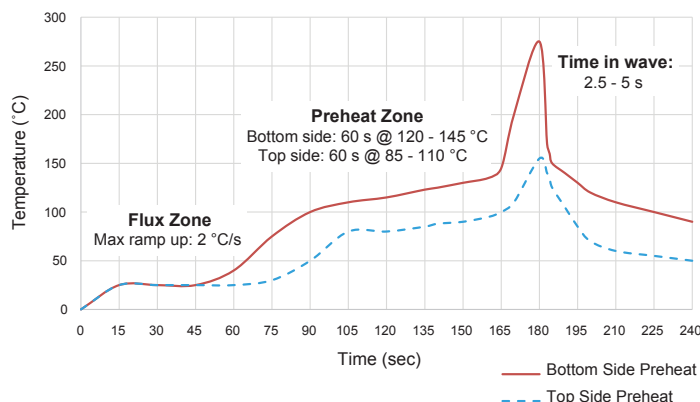
International: +(1) 905-331-1396

Europe: +(44)1663 362888

## Properties

Flux Classification	ORLO
Flux Type	Organic
Flux Activity	Low
Copper Mirror	Pass
Cleaning Requirements	Recommended
Acid Number (mgKOH/g sample)	14–16
Halides (by weight)	<0.5 %
Surface Insulation Resistance (SIR)	$2.1 \times 10^9 \Omega$

## Typical Lead-Free Wave Solder Profile



## Application Instructions

Read the product SDS before using this product (downloadable at [www.mgchemicals.com](http://www.mgchemicals.com)).

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.

## Wave Solder Operating Parameters

Amount of Flux:

Foam	1000–2000 µg/in <sup>2</sup> solids
Spray	750–1500 µg/in <sup>2</sup> 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 <sup>2</sup>

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

## 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.

## Storage and Handling

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

## 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.