

835 Liquid Technical Data Sheet

Rosin Flux

Description

835 is a rosin-based liquid flux with moderate activity. It is composed of pure Water White (WW) grade gum rosin in a unique solvent system with highly effective activators. Post soldering residues are non-conductive, non-corrosive, hydroscopic, non-tacky, and fungus resistant.

835 can be used for both automated and manual soldering applications. It is great for general purpose soldering of PCBs, wire, cable and semiconductors. It is also ideal for solder coating or tinning leads. It may be applied by spray, foam, or wave fluxing for wave soldering applications.

Features and Benefits

- Meets IPC J-STD-004B and type ROM1
- For both leaded and lead-free solders
- Fast wetting
- Excellent foaming
- RoHS compliant

Usage Parameters

Properties	Value
Shelf life	5 y
Storage temperature limits ^{a)}	18-27 °C [65-80 °F]

a) Store in a dry area, away from sunlight.



Properties

Flux Properties	Method	Value	
Flux classification	J-STD-004B MIL-F-14256F	ROM1 RA	
Flux type	J-STD-004B	Rosin	
Flux activity	J-STD-004B	Moderate	
Halides by weight	J-STD-004B	0.44%	
Copper mirror	IPC-TM-650 2.3.32	Partial removal	
Corrosion	IPC-TM-650 2.6.15	Pass	
Cleaning requirements	_	Recommended	
Physical Properties	Method	Value	
Color	Visual	Light amber	
Solids %	IPC-TM-650 2.3.34	50%	
Density	-	0.93 g/mL	
Flash point	Closed cup	12 °C [53 °F]	

Health and Safety

Please see the 835-liquid Safety Data Sheet (SDS) for further details on transportation, storage, handling, safety guidelines, and regulatory compliance.



Application Instructions

- 1. Apply flux on the surface via dip, spray, foam, wave, or brush application.
- 2. Clean residue with MG 4140 or 413B flux removers.

Recommended Operating Parameters

Properties	Value
Amount of flux	Foam, wave: 1 000–2 000 μg/in² solids Spray: 750–1 500 μg/in² solids
Foam fluxing parameters Foam stone pore size Flux level above stone Chimney opening Air pressure a)	20-50 μm 25-40 mm [1-1.5 inch] 10-13 mm [3/8-1/2 inch] 1-2 lb/in ²
Top side preheat temperature	85–110 °C [190–230 °F]
Bottom side preheat temperature	35 °C [65 °F] higher than top side
Conveyor speed	1.2–2.8 m/min [4–5 ft/min]
Contact time in solder (chip and lambda)	2.5–4.5 s
Solder pot temperature Sn96.5/Ag3.5 Sn95/Ag5 Sn99.3/Cu0.7 SnAgCu Sn95/Sb5	260-276 °C [500-530 °F] 280-296 °C [536-565 °F] 265-276 °C [510-530 °F] 271-276 °C [520-530 °F] 280-296 °C [536-565 °F]

a) Adjust the air pressure to achieve the optimum foam height.



Packaging and Supporting Products

Cat. No.	Packaging	Net Volume	Net Weight	Packaged Weight
835-100ML	Bottle	125 mL [4.22 fl oz]	116 g [4.10 oz]	140 g [0.31 lb]
835-1L	Bottle	1 L [1.05 qt]	930 g [2.05 lb]	1.05 kg [2.32 lb]
835-4L	Bottle	4 L [1.05 gal]	3.72 g [8.20 lb]	4.18 kg [9.22 lb]
835-P	Pen	10 mL [0.33 fl oz]	9.30 g [0.32 oz]	40 g [0.09 lb]

Technical Support

Please contact us regarding any questions, suggestions for improvements, or problems with this product. Application notes, instructions and FAQs are located at www.mgchemicals.com.

Email: <u>support@mgchemicals.com</u>

Phone: +(1) 800-340-0772 (Canada, Mexico & USA)

+(1) 905-331-1396 (International) +(44) 1663 362888 (UK & Europe)

Fax: +(1) 905-331-2862 or +(1) 800-340-0773

Mailing address: Manufacturing & Support Head Office

1210 Corporate Drive 9347—193rd Street

Burlington, Ontario, Canada Surrey, British Columbia, Canada

L7L 5R6 V4N 4E7

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.