

Description

The 837-P *Water Soluble Flux Pen* is a neutral, water-removable soldering flux. The organic activating system in 837-P has a neutral pH at room temperature and becomes activated at soldering temperature. The 837-P flux is formulated to be effective over a broad preheat range and may be used for both leaded and lead-free applications. It cleans easily with hot or cold water. A chiseled tip provides exact delivery of the flux to the surface.

Application & Usages

The 837-P pen is designed to dispense flux in a precisely. It is excellent for prototyping and rework/repair of printed circuit boards. It works well on chip carriers, heat sinks, surface mounted device pads, switches and sockets.

Features and Benefits

- **Good soldering properties**
- **Yields bright, shiny joints**
- **Excellent wettability**
- **Cleans with water**
- **Neutral pH**
- **RoHS compliant**

Flux Paste Properties

<i>Flux Properties</i>	<i>Method</i>	<i>Value</i>
Flux Classification	J-STD-004	ORH1
Flux type		Organic
Flux Activity		High
Halides %(wt)		2.2% ±0.3%
Copper Mirror	IPC-TM-650 2.3.32	Complete removal of copper film
Corrosion Test	IPC-TM-650 2.6.15	Pass (Cleaned)
Surface insulation resistance (SIR)	IPC-TM-650 2.6.3.3	1.8 × 10 ¹⁰ Ω
<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color		Colorless
pH		7.3 ±0.5
Solids%	IPC-TM-650 2.3.34	17.5% ±1%
Density	ASTM D 4212	0.85
Flash Point	Closed cup	12 °C [54 °F]

Storage and Shelf Life

Store at around room temperature and protect from direct heat or sunlight.

<i>Properties</i>	<i>Value</i>
Shelf Life after DOM	2 y
Storage Temperature	18 to 27 °C [65 to 80 °F]

DOM = date of manufacture

Health and Safety

Please see the 837-P **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

Application Instructions

Apply flux directly with the pen on the joint to be soldered.

Cleaning

Use hot or cold water to remove flux residues. A water spray pressure of 20 to 30 lb/in² (psi) is recommended. Use deionized water as a final rinse to meet MIL-28809A cleaning requirements.

Packaging and Supporting Products

<i>Cat. No.</i>	<i>Form</i>	<i>Net Volume</i>		<i>Net Weight</i>	
837-P	Pen	10 mL	0.33 fl oz	8.4 g	0.27 oz
837LFWS-1L	Liquid	1 L	33 fl oz	846 g	1.87 lb

Suitable Flux Cleaners

- *Heavy Duty Flux Remover*: Cat. No. 413B-1L, 413B-4L, 413B-20L, 413B-425G
- *Flux Remover for PC Boards*: Cat. No. 4140-P, 4140-400G, 4140-1L, 4140-4L, 4140-20L



ISO 9001 Registered Quality System.
Burlington, Ontario, Canada QMI File # 004008

Water Soluble Flux Pen 837-P Technical Data Sheet

837-Pen

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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