

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.

Environmental Impact: The volatile organic content is 72% by EPA and WHMIS standards.



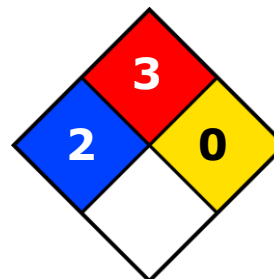
This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

Health and Safety: Avoid breathing fumes. Wash hands thoroughly after use. Do not ingest.

HMIS® RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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
837LFWS-4L	Liquid	4 L	1.06 gal	3.38 kg	7.46 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

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.

Email: support@mgchemicals.com

Phone: 1-800-340-0772 (Canada, Mexico & USA)
1-905-331-1396 (International)

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Surrey, British Columbia, Canada
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Warranty

M.G. Chemicals Ltd. warrants this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

Disclaimer

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