

## Description

The 413B *Heavy Duty Flux Remover* aerosol is specially formulated to dissolve and remove the most stubborn, encrusted, hard, baked-on fluxes and residues left on parts after soldering. It penetrates quickly to remove non-ionic and ionic contaminants left on the non-component side of circuit boards. It can also work aggressively on isolated and hard to reach areas requiring spot cleaning. It is also offered in liquid formats.

## Applications & Usages

It is great for removing rosin, non-rosin, no-clean fluxes, non-ionic and ionic contamination.

## Benefits and Features

- **RoHS Compliant**
- **Quickly dissolves burnt on flux**
- **Fast dry time**
- **Zero residue**

**CARB  
COMPLIANT**  
Categories & Limit:  
Electronic Cleaner 75%

## Usage Parameters

<i>Properties</i>	<i>Value</i>
Shelf Life	5 y

## Temperature Ranges

<i>Properties</i>	<i>Value</i>
Storage Temperature Limits <sup>a)</sup>	-20 to 40 °C [-4 to 104 °F]

a) Storage below zero is not necessary. Cool, dry, and well ventilated area recommended.

## Properties

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Odor	—	Ethereal
Color	Visual	Colorless
Specific gravity @25 °C [77 °F]	Literature	0.83 g/mL
Flash Point	"	-18 °C [-0.4 °F]
Boiling Point	"	≥56 °C [≥132 °F]
Auto-ignition	"	425 °C [797 °F]
Water miscibility	Literature	Partially soluble

## Compatibility

It is generally compatible with plastics, seals, PCB components, paints, rubbers, and plant fibers.

## Health, Safety, and Environmental Awareness

Please see the 413B-Aerosol **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

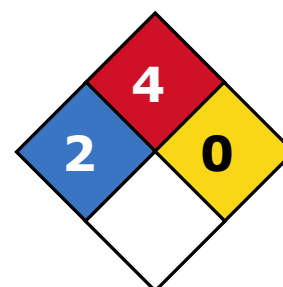
**Environmental Impact:** The VOC (Volatile Organic Compound) content is 53% [437 g/L] by EPA and WHMIS standards.

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

### HMIS® RATING

<b>HEALTH:</b>	<b>2</b>
<b>FLAMMABILITY:</b>	<b>4</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

### NFPA® 704 CODES



*Approximate HMIS and NFPA Risk Ratings Legend:*

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

**Health and Safety:** The 413B is flammable and shouldn't be used in the presence of open flames or other ignition source. Keep container closed. Avoid prolonged breathing of vapors. Use with adequate ventilation.

## Application Instructions

Follow the procedure below for best results.

### To clean residues in aerosol format

1. Spray flux remover onto the flux and brush with a hog hair cleaning brush.
2. Hold the board vertically and rinse liberally until the flux remover runs off the board. Hold the board so that wash flows along the shortest component-free path.

**NOTE:** Immediately after spot cleaning with the 413B, it is recommended to rinse the entire board with deionized water, test cleanliness, and dry. This is to ensure that the board is clean enough for your application.

### TIP!

Ensure the dissolved solids are rinsed off completely before the flux remover evaporates to prevent solids re-deposits.



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

# Heavy Duty Flux Remover 413B Technical Data Sheet

413B-Aerosol

## Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>		<i>Packaging Weight</i>	
<b>413B-425G</b>	Aerosol	498 mL	16.8 fl oz	425 g	14.9 oz	5.4 kg <sup>a)</sup>	11.9 lb <sup>a)</sup>
<b>413B-1L</b>	Can	945 mL	31.9 fl oz	784 g	1.72 lb	5.4 kg <sup>b)</sup>	11.9 lb <sup>b)</sup>
<b>413B-4L</b>	Can	3.78 L	3.99 qt	3.13 kg	6.91 lb	3.6 kg	7.94 lb
<b>413B-20L</b>	Pail	18.9 L	5.0 gal	15.6 kg	34.5 lb	17.6 kg	38.8 lb

TBD = To be determined

a) Case pack of 10

b) Case pack of 5

## Supporting Products

- *Acetone*: Cat. No. 434-1L, 434-4L
- *Hog Hair Cleaning Brush*: Cat. No. 852
- *Large Hog Hair Cleaning Brush*: Cat. No. 853

## 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](http://www.mgchemicals.com).

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

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

+ (1) 905-331-1396 (International)

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

Mailing address: **Manufacturing & Support**  
1210 Corporate Drive  
Burlington, Ontario, Canada  
L7L 5R6

**Head Office**  
9347-193rd Street  
Surrey, British Columbia, Canada  
V4N 4E7

## 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

This information is believed to be accurate. It is intended for professional end users having the skills 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.