

## Description

The 400-LF series *Lead Free Super Wick* are high quality, precision cleaned desoldering braids that were produced with up-to-date and environmentally friendly processes and technology. The high-purity copper conducts heat fast, allowing for faster wicking and shorter dwell time that minimizes possible overheating damages.

## Benefits and Features

- **Conforms to MIL-F-14256E RMA flux and J-STD-004**
- **High purity, oxide-free copper**
- **ESD (Electrostatic Dissipative) safe for 1.5 m [5 ft] bobbins**
- **Environmentally and PCB safe residues**
- **Suitable for Use in Food Facilities as a Non-Food Chemical**—Canadian and NFS recognition letters available on request

### ENVIRONMENT

- ✓ RoHS
- ✓ REACH compliant

## Desoldering Braid Selection Guide

| Cat No. | Width |     | Length |     | ESD Safe Spools | Label Color Code |
|---------|-------|-----|--------|-----|-----------------|------------------|
|         | in    | mm  | ft     | m   | anti-static     |                  |
| 424-LF  | 0.06  | 1.5 | 5      | 1.5 | Yes             | <b>YELLOW</b>    |
| 425-LF  | 0.08  | 2.0 | 5      | 1.5 | Yes             | <b>GREEN</b>     |
| 426-LF  | 0.10  | 2.5 | 5      | 1.5 | Yes             | <b>BLUE</b>      |

## Flux Properties

High temperature, mildly activated rosin flux.

| Physical Properties   | Method                                | Value                 |
|-----------------------|---------------------------------------|-----------------------|
| Flux Classification   | Conforms to MIL-F-14256F<br>J-STD-004 | R (Rosin)<br>ROL0     |
| Flux Percentage       | —                                     | <5%                   |
| Corrosion             | JIS Z 3197 and QQ-SS-571d             | Non-corrosive residue |
| Cleaning Requirements | —                                     | Optional              |

## Compatibility

**Chemical**—the flux residue from the Super Wick is inert under normal conditions. The flux residue can be cleaned with a flux cleaner like the MG 4140 or 413B.

## Storage

Keep away from moisture. Shrink wrapping is recommended for extended storage. Store between 22 and 27 °C [72 and 81 °F] in dry area away from sunlight.

## Health, Safety, and Environmental Awareness

Please see the 400-LF Series **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

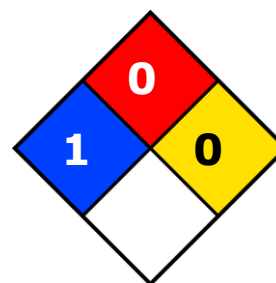
**Health and Safety:** The Lead Free Super Wick may cause allergic reactions in some individuals. Avoid breathing fumes produced during desoldering.

Other than possible allergic reactions, the flux residue presents no known health or environmental hazard.

### HMIS® RATING

|                             |            |
|-----------------------------|------------|
| <b>HEALTH:</b>              | <b>* 1</b> |
| <b>FLAMMABILITY:</b>        | <b>0</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)

## Braid Desoldering Instructions

Wicking works best for the removal of surface solders. This desoldering method is generally not recommended for removal of solder in through plated holes. While the use of desoldering (wicking) braids is not hard, it does require a moderate to advance skill level depending on the project. Novices should practice on scrap pieces before attempting to an actual repair.

### Equipment and Material Needed

- Solder iron equipped with a chisel tip that matches the size of the wick
- Damp sponge
- Scissors
- (Optional) flux—like the MG 8341 No Clean Flux Paste
- (Optional) cleaners—like the MG 4140 Flux Remover or 413B Heavy Duty Flux Removers

### Preparation Steps

- Remove conformal coating that may be present.
- Clean residues/oxides that are present using a flux remover.
- For lead-free solder, start with tip temperature of about 315 °C and adjust as necessary.
- Choose a braid that matches the size of the solder to be removed. If there are small beads, choosing a wider braid will also speed up the desoldering process.

### To Remove Surface Solder

1. Heat up the soldering iron.
2. (Optional) Apply flux to the lead or land area.
3. Set the braid on the solder to be removed.
4. Place the solder tip on the braid, avoiding contact with other components.
5. When wicking action has ceased, remove the soldering iron and braid together in perpendicular motion from the surface.
6. Let the area cool, clean the tip with the sponge, and repeat removal steps as necessary.
7. Clean flux residue that may have accumulated.

**ATTENTION:** Do NOT let braid solidify on the joint.

**TIP!** To avoid “drag whiskers”, do not move the wick along the surface during desoldering.

**TIP!** Be careful not to overheat

**TRICKS:** When the solder bead to be removed is very thin, adding a little bit of solder to the joint prior to the removal attempt can help.

**TRICKS:** Cutting an oversized braid at an angle with scissors can help with desoldering small areas.

### To Put Away the Soldering Iron

- Re-tin tip with solder and place the soldering iron on its stand.

## Supporting Products

### Flux Cleaners

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

### Thinners & Conformal Coating Removers

- *Thinner 2:* Cat. No. 4352-945ML, 4352-4L (1 gal), 4352-20L, 4352-200L
- *Conformal Coating Stripper:* Cat. No. 8310-100ML

### Tip Tinner

- *Tip Tinner:* Cat. No. 4190-28G

### Electronic Cleaners

- *Safety Wash Electronics Cleaner:* Cat. No. 4050A-340G, 4050-1L, 4050-4L, 4050-20L
- *Superwash Cleaner Degreaser:* Cat. No. 406B-450G
- *Isopropyl Alcohol:* Cat. No. 824



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

## Lead Free Super Wick 400-LF Series Technical Data Sheet

400-LF Series

### 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

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