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

# Conformal Coating Stripper—Gel 8311 Technical Data Sheet

8311

## **Description**

The 8311 Conformal Coating Stripper—Gel removes most reworkable conformal coatings. For example, the 8311 stripper readily removes thermoplastic (non-cross linked) acrylics, urethanes, and silicones based conformal coatings. It is also facilitates the removal of some thermoset coatings like cross-linked silicones and polyurethanes, by softening or swelling the coat to aid with mechanical removal.

This stripper remains safe for many types of PCB components. Not to mention being fully biodegradable, so it is not a long-term environmental hazard.

# **Applications & Usages**

The primary applications of the 8311 are for PCB maintenance and repairs. It also works well for removing conductive ink lacquers. It can be easily applied to small areas.

#### **Benefits and Features**

- Biodegradable
- Strips acrylics, polyurethanes, and silicone
- Ideal for spot removal of conformal coatings
- Safe on metals and most PCB components

# **Usage Parameters**

| Properties | Value |
|------------|-------|
| Shelf Life | 2 y   |

## Temperature Ranges

| <b>Properties</b>   | Value          |
|---------------------|----------------|
| Constant Service    | 5 to 40 °C     |
| Temperature         | [41 to 104 °F] |
| Storage Temperature | 1 to 30 °C     |
| Limits a)           | [34 to 86 °F]  |
|                     |                |

a) Do not allow to freeze. Do not store above 30 °C.

# **Principal Components**

NameCAS Number1-Methyl-2-pyrrolidinone872-50-4D-Limonene5989-27-5Paraffin waxes and hydrocarbon waxes8002-74-2



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# **Properties**

| Physical Properties    | Method      | Value             |
|------------------------|-------------|-------------------|
| Color                  | Visual      | Cloudy, amber     |
| Odor                   |             | Sweet citrus      |
| Density @25 °C [77 °F] | ASTM D 1475 | 0.97 g/mL         |
| Viscosity a)           |             | 1 680 cP          |
| Boiling Point b)       |             | ≥176 °C [≥349 °F] |
| Flash Point b)         |             | ≥43 °C [≥110 °F]  |
|                        |             | _                 |

- a) Brookfield viscometer at 60 RPM with spindle LVS63
- b) Values based on d-limonene component

## Compatibility

Although this stripper is safe for most materials found on printed circuit boards, always carry out a suitability test on similar substrates prior to use. Protect areas not being stripped and avoid excessive exposure time.

# **Storage**

Store in an area above freezing temperature but below 30 °C [86 °F]. Ensure that storage area is dry and away from sunlight. Do not store next to strong oxidizers, acids, or bases.

# **Health and Safety**

Please see the 8311 **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

Health and Safety: The 8311 stripper is a combustible gel that can ignite if the liquid is heated.

Wear safety glasses or goggles and disposable butyl rubber, polyvinyl chloride, neoprene, or nitrile gloves while handling liquids. Wash hands after use or if skin contact occurs. Do not ingest.

#### **HMIS® RATING**

| HEALTH:              | * | 2 |
|----------------------|---|---|
| FLAMMABILITY:        |   | 2 |
| 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)

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# **Application Instructions**

Follow the procedure below for best results. Because it is a gel, you may rework only specific areas of the printed circuit board. If necessary, mask areas not being stripped.

#### Material & Equipment

- Wiping cloth
- Non-abrasive brush
- Solvent-based PCB Cleaner (824 Isopropyl Alcohol or 4050 Safety Wash)
- Protective gloves

#### To remove the conformal coating

- 1. Apply a liberal amount of stripper with the 8311 cap brush.
- 2. Let sit about 1-2 hours or until the coat has softened.
- 3. (Optional) Use a non-abrasive brush or tool to remove most of the stripper, and then gently wipe surface with a clean cloth dampened with an organic PCB cleaner.
- 4. Rinse with a PCB cleaner or isopropyl alcohol to remove the remaining stripper.
- 5. Repeat steps 1 to 4 if necessary.

# **Packaging and Supporting Products**

| Cat. No.                 | Form             | Net Volume       |                        | Net Weight     |                  | Shipping Weight |          |
|--------------------------|------------------|------------------|------------------------|----------------|------------------|-----------------|----------|
| 8311-150ML<br>8311-850ML | Liquid<br>Liquid | 150 mL<br>850 mL | 5.07 fl oz<br>28 fl oz | 145 g<br>822 g | 5.11 oz<br>28 oz | TBD<br>"        | TBD<br>" |
| 8311-3.78L               | Liquid           | 3.60 L           | 121 fl oz              | 3.48 kg        | 7.67 lb          | II .            | "        |
|                          |                  |                  |                        |                |                  |                 |          |

#### **Supporting Products**

Safety Wash: Cat. No. 4050Isopropyl Alcohol: Cat. No. 824

Cleaning Brushes (non-abrasive): Cat. No. 852, 853, 859, 855, 856, or 857



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# **Technical Support**

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at <a href="https://www.mgchemicals.com">www.mgchemicals.com</a>.

Email: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

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 Head Office

1210 Corporate Drive 9347–193rd Street

Burlington, Ontario, Canada Surrey, British Columbia, Canada

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## **Warranty**

M.G. Chemicals Ltd. warranties 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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