4226A Liquid

Chemicals

Clear Insulating Varnish

4226A is a highly insulating coating with excellent arc and corona resistance. This clear, low viscosity, one-part varnish coating is easy to use and adheres well to many substrates.

This product insulates transformers, coils, motor windings, and various electric generator parts against arc and corona. As well, it protects these parts from corrosion and moisture.



Features and Benefits

- Material Group I (CTI ≥600 V, PLC=0)
- Excellent finish—tough, flexible, glossy, and durable, transparent coat
- · Good adhesion
- Resistant to transformer oil and moisture
- · Low VOC and HAP-free
- Does not contain toluene, xylene and MEK

Cured Properties

| Dielectric Strength | 3 000 V/mil |
|----------------------------------|-------------|
| Breakdown Voltage | 5.5 kV |
| Comparative Tracking Index (CTI) | 600 V |
| Service Temperature | -30-180 °C |

Available Packaging

| Cat. No. | Packaging | Net Vol. | Net Wt. |
|-------------|-----------|----------|---------|
| 4226A-55ML | Bottle | 55 mL | 52.6 g |
| 4226A-1L | Can | 945 mL | 904 g |
| 4226A-3.78L | Can | 3.78 L | 3.61 kg |
| 4226A-18.9L | Pail | 18.9 L | 18.0 kg |

Usage Parameters

| Dry to Touch | 1 h |
|------------------------------------|------------------------|
| Recoat Time | 15 min |
| Recommended Film Thickness | 25-38 µm |
| Theoretical Coverage @ 25 µm | 100 ft ² /L |
| (based on 65% transfer efficiency) | |

Contact Information

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Uncured Properties

| Resin Type | Acrylic, modified alkyd |
|-------------------|-------------------------|
| Viscosity @ 25 °C | 50 cP |
| Density | 0.96 g/mL |
| Percent Solids | 45 % |
| Calculated VOC | 520 g/L |

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Application Instructions

Read the product SDS before using this product (downloadable at www.mgchemicals.com).

Recommended Preparation

Clean the substrate with Isopropyl Alcohol, MG #824, so the surface is free of oils, dust, and other residues.

Brush

4226A can be applied by brush for rework or touch-ups. Thinning is not required for most brush applications. Desired coating thickness can be achieved in a single application. Applied coating can be cured immediately.

Manual Spray Guns

Use a standard fluid nozzle gun with a minimum tip diameter of 0.8–1.0 mm. The settings listed below are recommendations; however, performance will vary with different brands:

| Inlet | Air flow | Air cap |
|-----------|------------|----------|
| 20-40 psi | 10-15 SCFM | 8–10 psi |

- 1. Dilute the coating with Thinner 2 if required.
- **2.** Stir the coating gently but thoroughly.
- 3. Spray a test pattern to ensure good flow quality.
- **4.** Tilt the board at 45° and spray a thin even coat from a distance of 20–25 cm (8–10 in). Use spray-and-release strokes with an even motion to avoid paint buildup in one spot. Start and end each stroke off the surface.
- **5.** Wait 15 min before applying another coat, to avoid trapping solvent.
- **6.** Rotate the board 90° and spray again to ensure good coverage.
- **7.** Apply additional coats until desired thickness is achieved (go to step 3).
- **8.** Let dry 15 min at room temperature before applying heat cure.

Dip Coat

Use a Ford or Zahn cup to monitor the viscosity of the coating, as the solvent will evaporate over time.

- 1. Hang the PCB on a dipping arm.
- Slowly lower the PCB into a tank and leave immersed in the coating for 2 min to allow penetration.
- **3.** Slowly withdraw the PCB from the tank at a rate of approximately 6" per minute.
- **4.** Let dry for 15 min before applying additional coats or heat cure.

Cure Instructions

Allow to dry at room temperature for 10 hours or cure the coating in an oven for 2 hours @ 80 °C.

Clean-up

Clean spray system and equipment with acetone, MG #434.

Storage and Handling

Store between -5 and 25 °C in a dry area, away from sunlight (see SDS).

Disclaimer

This information is believed to be accurate. It is intended for professional end-users who have the skills required 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.