

422C-445ML



Circuit Board Waterproofing Spray

422C-445ML is a 1-part, acrylic-silicone blend conformal coating that cures to a durable, flexible and smooth finish. It is easy to apply and can be handled in only 10 minutes. It may be removed with appropriate strippers or soldered through for repair or rework.

422C-445ML is designed for applications where both high service temperature and flexibility are required. It puts minimum stress on components during thermal cycling, making it ideal for applications that involve a wide temperature range. It provides strong protection against moisture, corrosion, fungus, dirt, dust, thermal shock, short circuits, high-voltage arcing, and static discharge.



Features and Benefits

- Certified UL94 V-0
- Maximum service temperature of 200 °C
- Fluoresces under UV-A light
- Suitable for use with selective coating equipment
- Corrosion resistant

Available Packaging

Cat. No.	Packaging	Net Vol.	Net Wt.
422C-445ML	Aerosol	406 mL	340 g

Contact Information

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Cured Properties

Resistivity	3.5 x 10 ¹³ Ω·cm
Dielectric Strength	1 076 V/mil
Dielectric Withstand Voltage	>1 500 V
Glass Transition Temperature (T _g)	31 °C
CTE Prior T _g	111 ppm/°C
Service Temperature Range	-40–200 °C

Usage Parameters

Dry Time To Handle (1 coat)	10 min
(2 coats)	15 min
Minimum Recoat Time	2 min
Recommended Film Thickness	25–75 µm
Theoretical Coverage @ 25 µm	7 200 cm ²

Uncured Properties

Viscosity @ 25 °C	TBD
Density	0.90 g/mL
Percent Solids	15 %
Shelf Life	5 y
Calculated VOC	439 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.

Spray

1. Shake the can vigorously.
2. Spray a test pattern to ensure good flow quality.
3. 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.
4. Wait 10 min before applying another coat, to avoid trapping solvent.
5. Rotate the board 90° and spray again to ensure good coverage.
6. Apply additional coats until desired thickness is achieved (go to step 3).
7. Let dry 10 min at room temperature before applying heat cure.
8. After use, clear the nozzle by inverting the can and briefly spraying until clear propellant comes out.

Cure Instructions

Allow to dry at room temperature for 24 hours, or after letting sit for 10 minutes, cure the coating in an oven at one of these time/temperature options:

Temperature	65 °C	80 °C
Time	20 min	10 min

Storage and Handling

Store between -5 and 40 °C in a 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.