

MS-470S / 472S Urethane Conformal Coating

Description

Urethane Conformal Coating offers superior toughness and abrasion resistance and excellent protection from humidity and organic solvents. Printed circuit boards covered with urethane coating are repairable. Simply heat the coating with a soldering iron to remove the components. The base resin conforms to MIL-I-46058C Type UR, IPC-CC-830B and is UL 94 V-0 listed. The coating is recognized under UL file number E105698

Allow 48 hours minimum to reach room temperature before using cans stored or received during cold weather.

Application

Air dry for 10 minutes. Repeat up to 2-3 coats. The recommended cure schedule is 3 hours at 169°F/ 76°C. The alternate cure, at room temperature, will be tack free in one to four hours, and fully cured in 24 hours. Time required to reach optimum properties is 7 days at room temperature

MS-470S will cover 8.6 square feet @ a 2-mil thickness per 12oz can. MS-472S is available in quarts and gallons for dip, brush, or spray applications and will cover 120 square feet per gallon at a 2-mil thickness

NOTE: DO NOT SHAKE CAN AGGRESSIVE; INVERT CAN AND PURGE AFTER EVERY USE. Valve and actuator clogging will occur if this is not performed.

Urethane conformal coating can be removed with MS-114C or MS-115 Conformal Coating Strippers.

Cured Electrical Properties

Dielectric Strength, volts/mil	1200
Dielectric Constant @ 10 ⁵ Hz	3.5
Dissipation Factor @ 10 ⁵ Hz	0.028
Volume Resistivity (ohm)	3.0 x 10 ¹⁴

Cured Physical Properties

Operating Temperature: -85°F/-65°C to 257°F/ 125°C

Appearance: No blistering, wrinkling, cracking, or peeling of film, or substrate after thermal shock, or after moisture resistance testing.

Flexibility: No cracking or crazing of film on bending over a 1/8" diameter mandrel.

Fungus Resistance: Non-nutrient per ASTM G21

Fluorescent when viewed with ultraviolet light.

Fluorescent when viewed with ultraviolet light. Miller-Stephenson offers urethane, acrylic and silicone conformal coatings available in aerosol and bulk liquid.

Safety Data Sheets (SDS) are available upon request.

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