



Product Information

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MS-475C / 477C Acrylic Conformal Coating

Description:

Acrylic Conformal Coating offers superior toughness and abrasion resistance, excellent dielectric properties, fungal resistance, and moisture and environmental protection. Acrylic resin meets the requirements of MIL-I-46058C Type AR. It is solderable for ease of repair.

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

Application:

MS-475C will cover 6.4 sq. ft. at a 2 mil. thickness per 14 oz. aerosol can. MS-477C, the bulk liquid version of this product, is available in quarts and gallons for dip, brush, or spray application, and will cover 91 sq. ft. per gallon at a 2 mil. thickness.

Drying and curing of acrylic coating depends upon evaporation of the solvent. Air dry coated boards for 30 minutes at 77°F/25°C to remove solvents before curing in oven or applying additional coats.

The recommended cure time is 45 minutes at 167°F/75°C. The alternate cure is 24 hours at 77°F/25°C. Acrylic coating will be tack free in one hour, semi-hard in four hours, and fully cured in 24 hours. Deaeration is not recommended.

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

Acrylic conformal coating can be removed with MS-114D or MS-115 Conformal Coating Strippers.

VOC Content for MS-475C.....336 g/l
VOC Content for MS-477C.....673 g/l

Cured Electrical Properties:

Dielectric Strength, volts/mil	2000
Dielectric Constant/Dissipation Factor @ 25°C	
100 Hz	2.78/0.79
10 kHz	2.36/0.027
100 kHz	2.29/0.012
Volume Resistivity, ohm-cm	
@ 25C	1.04x10 ¹⁶
@ 60C	3.89x10 ¹⁴
@ 90C	2.86x10 ¹³
@ 110C	9.25x10 ¹²

Cured Physical Properties (per MIL-1-46058C)

Operating Temperature: -67°F/-55°C to 230°F/ 110°C

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

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

Fungus Resistance: Non-nutrient per ASTM G21.

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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