

## 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-114C or MS-115 Conformal Coating Strippers.

### Cured Electrical Properties

Dielectric Strength (volts/mil)	2000
Dielectric Constant (10Hz )	2.29
Dissipation Factor 10 <sup>5</sup> Hz	0.012
Volume Resistivity (ohm/cm)	1.04x10 <sup>16</sup>

### 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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