

Dual-Cure 9771 Conformal Coating

Superior PCB Protection with Low Outgassing and Ionic Content

Dual-Cure 9771 conformal coating was developed to meet the strict requirements of the aerospace and defense market. It is ideal for protecting printed circuit boards in missiles, satellites, and other space devices where exposure to extreme conditions are an obstacle. This conformal coating cures with UV/Visible light and features a secondary moisture-cure function to ensure complete cure of coating that flows into shadow areas.

Features & Benefits

- Meets ASTM E595 low outgassing
- Low ionic content compliance with Mil-Std 883 Method 5011
- Approvals: MIL-I-46058C, IPC-CC-830-B, UL 746-E, & UL94V-0
- UV/Visible light cure with secondary moisture cure for shadow areas
- Excellent corrosion resistance
- Temperature and humidity resistance
- Fluoresces bright blue for easy inspection

9771 Performance & Reliability Testing

Download the [9771 product data sheet](#) for additional test data.

Mil-Std 883 Junction Coating Type II



9771 passed the following Mil-Std 883 Method 5011.7 tests:

- Thermal stability and filler content via thermogravimetric analysis
- Specific ion content
- Total ionic content
- Hydrogen ion content (pH)
- Volume resistivity

ASTM E595 Outgassing

Parameter	Screening Level (%)	Result
Total Mass Loss (% TML)	1.00 maximum	✓ Pass
Collected Volatile Condensable Material (% CVCM)	0.10 maximum	✓ Pass
Water Vapor Recovered (% WVR)	0.02 maximum	✓ Pass

ASTM B117 Salt Fog Resistance

Testing:
Coating thickness of 0.005" (127µm)
exposed to 35°C, 5% salt solution for 500 hr.

Results:
No disruptive charge by flash over, spark over or break-down in house voltage transient test (based on UL-746E) as well as no corrosion present on boards.



No Coating



Coated with 9771

Heat & Humidity 85°C/85% R.H.

Product	Description
9771	Good performance
Competitive Product 1	Bad performance with severe corrosion
Competitive Product 2	Bad performance with severe corrosion
Competitive Product 3	Bad performance with blistering



Dymax manufactures light-curable adhesives, coatings, and maskants, as well as compatible dispensing and curing equipment. We focus on creating solvent-free materials that cure clean, green, and fast, helping engineering teams accomplish more in less time and with less negative impact on the environment.

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