



**AI TECHNOLOGY INC**  
 70 Washington Road  
 Princeton Jct., NJ 08550  
 (609) 799-9388 fax (609) 799-9308  
 E-Mail: ait@aitechnology.com  
 Internet: http://www.aitechnology.com

Moisture and Corrosive Gases Barrier  
 UV Tracing and Antifungal  
 IPC-CC-830C & MIL-I-46058C Compliant  
 5B ASTM 3359 Adhesion  
 Ultra-High Insulation Resistance

**IDEAL FOR:**

- ANSI ISA-71.04-2013 GX Corrosion Protection.
- Excellent for high sulfur environments
- Protection in hazardous environment from -55°C to 125°C
- Proven moisture-heat, salt-spray protection

**DESCRIPTION:**

CC7650 is a Solvent and VOC free water-borne conformal coating that can be applied with spray, brush and dip coating methods without requiring extensive suit-up or specialized ventilation. It is a non-silicone, transparent, electrically insulating conformal coating that meets and exceeds Parylene performance at the same thickness. The dried coating is proven with outstanding moisture and corrosive gases barrier for outstanding protection of circuit boards for aeronautic electronics even when exposed to salt-fog and salt-spray hot ocean weather. The outstanding flexibility and adhesion on printed circuit board provide interfacial stress reduction in achieving long-term reliability.

CC7650 has a compact molecular structure to provide 100 times more barrier capability than traditional acrylic, polyurethane and silicone conformal coating in blocking moisture and corrosive gases including sulfur dioxide, hydrogen sulfide and other corrosive gases.

**AVAILABILITY:**

CC7650 is available in pint and gallon containers.

**APPLICATION PROCEDURES:**

1. Clean coating surfaces to remove grease, dirt, and contaminants. Mask off any areas that should not be covered.
2. Dip-brush or spray coating on designated areas.
3. For spray coating, airless spray is preferred. For air spraying, please reduce and adjust air intake and proximity to the spraying areas for optimized results.
4. Double coating processes are generally recommended to ensure full and complete coverage at thickness of 15-50 micron.

**CAUTION:** This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details. The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.

**MOISTSEAL COATING**  
**CC7650**

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 25 °C/ As is )	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-50 ±10%
Lap-Shear Strength	N/A
Device Push-off Strength	N/A
Hardness (Type)	Shore A: 50
Cured Density (gm/cc)	1.4
Thermal Conductivity	1.4 Btu-in/hr-ft <sup>2</sup> -°F ±10% 0.20 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	75 ±15%and
Maximum Continuous Operation Temp. (°C)	<150
<b>Viscosity 30 cps ±10% @ 5rpm</b>	

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**Cure or Drying**

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
25°C	>30min	
60°C	<10min	

Insulation Resistance Per IPC-TM-650, Method 1.6.3.4>10e11Ω (1100 times the highest requirement)t).

For extreme protection, CC7650 may be over-coated with CC-SC7150 may be over-coated.

CC7650 is the first conformal coating for printed circuit board and electronic devices that can reach ANSI ISA-71.04-2013 GX Corrosion Protection.

CC7650 contains no solvent and is compliant with UL-94V0 for self-extinguishing.

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	1 yr
	in sealed package