



# 60-7106

## UV Curable Low CTE Encapsulant

### DESCRIPTION:

UV Cure 60-7106 is a one-component ultraviolet (UV) curable encapsulant, adhesive and coating. This is an electronic grade material designed for applications requiring a low Coefficient of Thermal Expansion (CTE).

UV Cure 60-7106 has excellent dielectric properties, high chemical and thermal stability. This system is 100% solids and has the ability to shadow or heat cure. 60-7107 is a lower viscosity version of 60-7106.

### FEATURES:

- \*UV Curable, Fast Cure
- \*One Component
- \*Will shadow cure
- \* Low CTE
- \* Low ionic impurities
- \* Excellent Adhesion

### TYPICAL SPECIFICATIONS:

Color	Off White
Solids content, %	100
Chemical Type	UV Epoxy
Specific gravity, 25°C	1.75
Hardness, Shore D	90D
Viscosity, 25°C, cps	70,000 – 90,000
Thixotropic Index	2.5 – 3.0
Coefficient of thermal expansion, CTE, ppm/°C	35.
Glass Transition temperature, °C	80
Volume Resistivity, ohms/cm	$1.5 \times 10^{15}$
Dielectric constant, 60hz	3.5
Dielectric Strength, Volts/mil	450
Extractable Ions, ppm	
CL	<10
Na	<10
K	<10

### CURE SCHEDULE:

	<u>50 ml thick section</u>
UV 100 Spot Cure	5w power 30 sec.
UV Cure Conveyor	2 passes 20 FPM - 300 w/in med. Press Hg



Cure speed is dependent upon the UV light source, thickness of material, distance from the light, and UV transmission of substrates through which the UV light must pass to reach the adhesive.

Cure speed may be increased by warming material or substrate. Cure speed may also be increased by IR or conventional thermal oven after UV exposure. For optimum curing of thick sections, a UV light source rich in long wavelength UV is recommended; such as electrode or electrodeless metal halide lamp.

### **STORAGE & HANDLING:**

Store out of sunlight in original container. Product shelf life under proper storage conditions is at least twelve months at temperatures between 40-60°F. Avoid exposing material to moisture.

UV Cure 60-7106 contains fillers. Gentle stirring may be necessary to assure uniform filler distribution. Refrigerated storage will help to eliminate filler settling.

### **AVAILABILITY:**

UV Cure 60-7106 is available in 10cc, 30cc and 55cc syringes, Quarts, Gallons and 5 Gallon Pails.

### **HYGIENE & SAFETY:**

Low potential for skin and eye irritation or sensitization. See OSHA Material Safety Data Sheet for more details on proper handling and precautions.

### **IMPORTANT:**

The information in this brochure is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

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