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# TECHNICAL DATA SHEET

## SOLARITE EP-211FRHTC SOLARCURE- 2 & 2B

**DESCRIPTION:** Solarite EP-211FRHTC is a thermally conductive moderate viscosity epoxy potting and casting compound that can be room temperature or heat cured depending upon the hardener chosen. When cured with Solarcure 2 a heat curable product with service temperature upto 155C can be produced. When cured with Solarcure 2B a heat cure product with service temperature of upto 200C can be achieved. EP-211FRHTC can be cured with various other custom Solarcure hardeners to adjust viscosity, hardness, cure time, exotherm, service temperature, thermal shock resistance etc.

### SPECIFICATIONS—UNCURED:

	<b>Part A</b>	<b>Solarcure-2B</b>	<b>Solarcure-2</b>
Color, Visual	Black	Off White	Amber
Mix Ratio—By Weight	100	52	10
Viscosity, cps, ASTM-D-2393	19,000	4000	200-220
Specific Gravity	1.80	1.30	0.98
Gel Time, 25°C, Hours		na	2-3
Mixed Viscosity, cps, ASTM-D-1084		14,000	13,000
Shelf Life, 25°C, Months	12	12	12

### SPECIFICATIONS—CURED:

#### PHYSICAL:

Durometer, ASTM-D-2240	85-90D	85-90D
Compressive Strength, psi, ASTM-D-695	13,700	14,100
Tensile Strength, psi, ASTM-D-638	10,500	11200
Tensile Elongation, Percentage, ASTM-D-638	2.0	5.0
Thermal Conductivity, BTU-in/ft <sup>2</sup> (Hour) (°F)	7.3	7.0
Flammability, UL 94V0	Passes	Passes
Service Temperature, °C	200	155

#### ELECTRICAL PROPERTIES:

Dielectric Strength, Volts/Mil, ASTM-D-149	415	425
Dielectric Constant, 1 kHz, ASTM-D-150	4.5	4.4
Dissipation Factor, 1 kHz, ASTM-D-150	0.02	0.02
Volume Resistivity, ohm/cm, ASTM-D-257	1x10 <sup>15</sup>	1x10 <sup>15</sup>

### **USE INSTRUCTIONS:**

1. Pre-mix contents of each container before use to ensure the entire contents are uniform. Some settling may occur upon prolonged storage the is soft and easily incorporated.
2. Measure out components of the product by weight and mix thoroughly together to incorporate any settled material.
3. De- air if necessary at 760 mm of Hg for 5-10 minutes.
4. Pour into cavity to be encapsulated.

### **CURE SCHEDULE:**

Solarcure 2B: Cure 2 [hours@200F](#) ,2 [hours](#) @ 265F, 1 hour @ 300F. Alternative cure for small parts , 265F for 2 hours then 1 hour at 300F.

Solarcure 2:. Highest Temperature performance 2 [hours@180F](#) then 3 hours@300F

### **STORAGE REQUIREMENTS:**

This product has a tendency to settle upon storage and shipment, material should be mixed well prior to use. Store in a cool dry place.

### **IMPORTANT:**

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### **HEALTH CAUTION:**

Avoid breathing possible fumes, mists and vapors which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clear water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

**PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION.**

FOR CHEMICAL EMERGENCY  
CALL CHEMTREC (DAY OR NIGHT) 800-424-9300.