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# TECHNICAL DATA SHEET

## SOLARITE EP-201FR

**DESCRIPTION:** Solarite EP-201FR is a semi-rigid room temperature curing 1 to 1 by volume or weight epoxy potting and casting compound, whose convenient mixing ratio makes it easy to use and well suited to automatic dispensing equipment. EP-201FR meets the requirements of Underwriters Laboratories flammability test UL 94V-0 and produces void free castings when potting electrical components.

### SPECIFICATIONS—UNCURED:

	<b>Part A</b>	<b>Part B</b>
Color, Visual	Black	Neutral
Mix Ratio—By Weight	1	1
Mix Ratio—By Volume	1	1
Viscosity, cps, ASTM-D-2393	8,000	8,000
Specific Gravity	1.45	1.45
Gel Time, 25°C, Hours		2-3
Mixed Viscosity, cps, ASTM-D-1084	8,000	
Shelf Life, 25°C, Months	12	

### SPECIFICATIONS—CURED:

#### PHYSICAL:

Durometer, ASTM-D-2240	75D
Compressive Strength, psi, ASTM-D-695	12,675
Tensile Strength, psi, ASTM-D-638	9,300
Tensile Elongation, Percentage, ASTM-D-638	10.0
Thermal Conductivity, BTU-in/ft <sup>2</sup> (Hour) (°F)	4.3
Coefficient of Linear Thermal Expansion °C ASTM-D-696-98	7.76 x10 <sup>-5</sup>
Flammability, UL 94V0	Passes
Service Temperature, °C	105

#### ELECTRICAL PROPERTIES:

Dielectric Strength, Volts/Mil, ASTM-D-149	422
Dielectric Constant, 1 kHz, ASTM-D-150	4.6
Dissipation Factor, 1 kHz, ASTM-D-150	0.02
Volume Resistivity, ohm/cm, ASTM-D-257	1x10 <sup>14</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. Settling in Part B is soft and easily incorporated. Settling in Part A can be readily re-dispersed with conventional mixing equipment.
2. Measure out equal components of the product by weight or volume 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:**

Initial cure is achieved in 16-24 hours at room temperature. Final cure takes at least 7-10 days at 72°F. To accelerate the cure, expose parts to higher temperatures, 2-4 hours at 150°F is usually sufficient, after allowing the product to gel at room temperature for 3 hours.

### **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.