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# TECHNICAL DATA SHEET

## SOLARITE EP-231HTC

**DESCRIPTION:** Solarite EP-231HTC is a semi-rigid heat curing 1 to 1 by weight epoxy potting and casting compound, whose convenient mixing ratio makes it easy to use. EP-231HTC is highly thermally conductive and can dissipate heat from electrical components whilst producing high gloss and void free castings. Designed to withstand service temperatures upto 155C often seen in transformers and coils during operation.

### SPECIFICATIONS—UNCURED:

	<b>Part A</b>	<b>Part B</b>
Color, Visual	Black	Neutral
Mix Ratio—By Weight	1	1
Viscosity, cps, ASTM-D-2393	22000	16000
Specific Gravity	2.1	2.1
Gel Time, 100°C, Hours		2
Mixed Viscosity, cps, ASTM-D-1084	20000	
Shelf Life, 25°C, Months	12	

### SPECIFICATIONS—CURED:

#### PHYSICAL:

Durometer, ASTM-D-2240	85-90D
Compressive Strength, psi, ASTM-D-695	12,675
Tensile Strength, psi, ASTM-D-638	9,500
Tensile Elongation, Percentage, ASTM-D-638	2.0
Thermal Conductivity, BTU-in/ft <sup>2</sup> (Hour) (°F)	10
Flammability, UL 94V0	na
Service Temperature, °C	155

#### ELECTRICAL PROPERTIES:

Dielectric Strength, Volts/Mil, ASTM-D-149	435
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>15</sup>

### **USE INSTRUCTIONS:**

1. Pre-mix contents of containers before use to ensure the entire contents are uniform. Some settling may occur upon prolonged storage the is soft and easily incorporated. Measure out contents according to the specified mix ratio and mix together.
2. Heat product to 100-175F to lower viscosity and aid pouring.
3. De- air if necessary at 760 mm of Hg for 5-10 minutes.
4. Pour into cavity to be encapsulated. Cavity may also be pre-heated to aid penetration and de-gassing

**CURE SCHEDULE:** Lowest Shrinkage: 7-9 [hours@190F](#) then 1-2 [hours@250F](#). Highest Temperature performance 2 [hours@250F](#) then 2 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.