



Solar Compounds Corporation
1201 West Blancke Street
Linden, NJ 07036 USA
Ph: 908-862-2813 Fax: 908-862-8061
Intnl: Ph: (0101) 908-862-2813 Fax: (0101) 908-862-8061
www.solarcompounds.com

TECHNICAL DATA SHEET

SOLARITE EP-0531

DESCRIPTION: Solarite EP-0531 is a glass fiber reinforced semi-rigid heat curing 1 to 1 by weight epoxy potting and casting compound, whose convenient mixing ratio makes it easy to use. EP-0531 has excellent electrical properties and produces void free castings with good thermal shock when potting electrical components. Designed to withstand service temperatures upto 155C often seen in transformers and coils during operation.

SPECIFICATIONS—UNCURED:

| | Part A | Part B |
|-----------------------------------|---------------|---------------|
| Color, Visual | Blue | Neutral |
| Mix Ratio—By Weight | 1 | 1 |
| Specific Gravity | 1.6 | 1.6 |
| Viscosity, cps, ASTM-D-2393 | 40,000 | 2200 |
| Mixed Viscosity, cps, ASTM-D-1084 | | 8000 |
| Cure ,Hours@ 100C | | 3-4 |
| Gel Time, Hours,100 °C | | 0.75-1.0 |
| Shelf Life, 25°C, Months | | 12 |

SPECIFICATIONS—CURED:

PHYSICAL:

| | |
|--|--------|
| Durometer, ASTM-D-2240 | 85-90D |
| Tensile Strength, psi, ASTM-D-638 | 7,500 |
| Tensile Elongation, Percentage, ASTM-D-638 | 2.0 |
| Thermal Conductivity, BTU-in/ft ² (Hour) (°F) | 4.5 |
| Service Temperature, °C | 155 |

ELECTRICAL PROPERTIES:

| | |
|--|--------------------|
| Dielectric Strength, Volts/Mil, ASTM-D-149 | 445 |
| 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 ¹⁵ |

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:

The following supersedes any provision in your company's forms, letters, and papers. **SOLAR COMPOUNDS CORPORATION** makes NO WARRANTY, WHETHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES of MERCHANTABILITY OR of FITNESS FOR A PARTICULAR PURPOSE FOR THIS PRODUCT. No statements or recommendations contained in the product literature are to be construed as inducements to infringe any relevant patent, now or thereafter in existence. UNDER NO CIRCUMSTANCES SHALL **SOLAR COMPOUNDS CORPORATION** BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES FROM ALLEGED NEGLIGENCE, BREACH of WARRANTY, STRICT LIABILITY OR ANY OTHER THEORY, ARISING OUT of THE USE OR HANDLING of THIS PRODUCT. The sole liability of **SOLAR COMPOUNDS CORPORATION** for any claims arising out of the manufacture, use or sale of its products shall be to refund the buyer's purchase price, provided such products have been demonstrated in **SOLAR COMPOUNDS CORPORATION'S** sole opinion, to justify such refund.

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.