



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-213UF SOLARCURE-1 & 2

**DESCRIPTION:** Solarite EP-213UF is a very low viscosity epoxy potting and casting compound designed for excellent penetration that can be room temperature or heat cured depending upon the hardener chosen. Room temperature cure is attained with Solarcure 1. When cured with Solarcure 2 a heat activated product with service temperature upto 155C can be produced. EP-213UF 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-1</b>	<b>Solarcure-2</b>
Color, Visual	Clear	Clear	Amber
Mix Ratio—By Weight	100	15-16	25-26
Specific Gravity	1.14	0.99	0.98
Viscosity, cps, ASTM-D-2393	700	70-90	200-220
Mixed Viscosity, cps, ASTM-D-1084		400	500
Gel Time, 25°C, Hours		0.5-0.6	2-3
Shelf Life, 25°C, Months	12	12	12

### SPECIFICATIONS—CURED:

#### PHYSICAL:

Durometer, ASTM-D-2240	85D	85D
Compressive Strength, psi, ASTM-D-695	14,050	15200
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)	1.6	1.6
Flammability, UL 94V0	na	na
Service Temperature, °C	105	155

#### ELECTRICAL PROPERTIES:

Dielectric Strength, Volts/Mil, ASTM-D-149	425	430
Dielectric Constant, 1 kHz, ASTM-D-150	4.0	4.2
Dissipation Factor, 1 kHz, ASTM-D-150	0.035	0.035
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.
2. Measure out components of the product by weight and mix thoroughly together .
3. De- air if necessary at 760 mm of Hg for 5-10 minutes.
4. Pour into cavity to be encapsulated.

### **CURE SCHEDULE:**

Solarcure 1: Initial cure is achieved in 12-24 hours at room temperature. Final cure takes at least 7-10 days at 72F. To accelerate the cure higher temperatures can be used, 2-3 hours at 150 F is usually sufficient. after allowing the product to gel at room temperature for 3 hours.

Solarcure 2: Highest Temperature performance 2 [hours@200F](#) then 2 hours@300F

### **STORAGE REQUIREMENTS:**

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.