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TECHNICAL DATA SHEET

SOLARITE SI-221FRLV

DESCRIPTION: Solarite SI-221FRLV is a general purpose low viscosity 1 to 1 by volume or weight RTV(Room temperature vulcanizing) silicone potting and casting compound, the convenient mixing ratio makes it easy to use and well suited to automatic dispensing equipment. SI-221FRLV is a UL V-O registered flame retardent compound and produces high gloss and void free castings when potting electrical components.

SPECIFICATIONS—UNCURED:

	Part A	Part B
Color, Visual	Black	Neutral
Mix Ratio—By Weight	1	1
Mix Ratio—By Volume	1	1
Viscosity, cps, ASTM-D-2393	1,500	1,500
Specific Gravity	1.45	1.45
Gel Time, 25°C, Hours		2
Mixed Viscosity, cps, ASTM-D-1084		1000 - 1,800
Shelf Life, 25°C, Months		12

SPECIFICATIONS—CURED:

PHYSICAL:

Durometer, ASTM-D-2240	62A
Tensile Strength, psi, ASTM-D-638	450
Tensile Elongation, Percentage, ASTM-D-638	125
Thermal Conductivity, BTU-in/ft ² (Hour) (°F)	3.0
Flammability, UL 94V0	Passes
Service Temperature, °C	-55 to 200

ELECTRICAL PROPERTIES:

Dielectric Strength, Volts/Mil, ASTM-D-149	500
Dielectric Constant, 1 KHz, ASTM-D-150	4.1
Dissipation Factor, 1 kHz, ASTM-D-150	0.0085
Volume Resistivity, ohm/cm, ASTM-D-257	1x10 ¹⁵

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 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. To accelerate the cure higher temperatures can be used, 2-4 hours at 150 F is usually sufficient. or 1 [hour@190F](#) or 15 minutes@250F.

NOTE: SI-221FR when placed in contact with certain materials may inhibit the cure. Anything that contains amines, amine cured epoxies, and tin cured silicones can cause poisoning. It is strongly recommended to test surface to be potted if in doubt.

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.