

Silicones - Addition Cure

RTVS 8127 LV

LOW VISCOSITY THERMALLY CONDUCTIVE POTTING COMPOUND

DESCRIPTION

RTVS 8127 LV is a low viscosity, flame retardant, reversion resistant silicone compound. The low viscosity and high thermal conductivity makes the RTVS 8127 LV ideal for potting dense component packages requiring heat dissipation. This compound has excellent thermal stability, electrical properties, is compatible with most electrical insulating materials and has a UL 94 Flame Rating of 94 V-0.

PROPERTIES-UNCURED:			
	Part A	Part B	
Color, visual	Gray	Neutral	
Viscosity, cps	5,000	3,000	ASTM D 1084
Specific Gravity	1.78	1.78	
Mix Ratio (by weight or volume)	1:1		
Mixed Viscosity, cps	4,000		
Pot Life @25°C, mins	30-60		
Shelf Life @25°C, months	12		
PROPERTIES-CURED:			
PHYSICAL:			
Hardness, Durometer (Shore A)	50-60		ASTM D 2240
Tensile Strength, psi	420		ASTM D 412
Tensile Elongation, %	120		ASTM D 412
Coefficient of Thermal Expansion, °C	8.0 x 10 ⁻⁵		
Thermal Conductivity, BTU-in/(ft ²)(hr)(°F)	5.2		
Thermal Conductivity, BTU-ft/(ft ²)(hr)(°F)	0.43		
Service Temperature, °C	-55 to +204		

ELECTRICAL:		
Dielectric Strength, volts/mil	500	ASTM D 149
Dielectric Constant, 1 KHz	4.0	ASTM D 150
Dissipation Factor, 1 KHz	0.005	ASTM D 150
Volume Resistivity, ohm-cm	1×10^{15}	ASTM D 257

MIXING INSTRUCTIONS:

1. Premix RTVS 8127 LV Part A and Part B in original containers before withdrawing any material. Some light, but soft settling will occur which readily redisperses.
2. Measure equal portions either weight or volume of Part A and Part B.
3. Mix thoroughly scraping both the bottom and the sides of mixing container.
4. Vacuum the mixture at 29 in. Hg for 3-4 minutes for void-free castings.
5. Pour into unit or mold.

CURE SCHEDULES:

Overnight at room temperature (24 hours at 25°C) or , 2 hours at 60°C, or 30 min. at 95°C, or 15 minutes at 120°C.

STORAGE REQUIREMENTS:

Store at room temperature. This product may settle upon shipment or storage. The product should be re-mixed well prior to use. Store material in a cool dry place.

SPECIAL NOTES:

Certain materials may inhibit the cure of RTVS 8127 LV when placed in contact with the mixed, uncured rubber. Materials such as amines and amine cured epoxies, sulfur containing materials and condensation (tin cured) silicones, are some which may cause inhibition. Even surfaces which have been in contact with such materials may cause it. If in doubt, a patch test should be done.

IMPORTANT:

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the buyer's purchase price, provided such products have been demonstrated in AMERICAN SAFETY TECHNOLOGIES, INC. sole opinion, to justify such refund.

HANDLING PRECAUTIONS:

RTV silicone rubber base compounds and the curing agents for addition cure products are non-hazardous and practically non-toxic. Curing agents for condensation cure products contain tin soaps which can irritate eyes and skin of some individuals. Avoid contact with skin; if contact occurs, wash affected areas at once with soap and water. Avoid contact with eyes. In case of contact with eyes, flush with water for 15 minutes; call a physician.