



Silicones, Inc.

P.O. Box 363
High Point, NC 27261
Tel: 336-886-5018
Fax: 336-886-7122
www.silicones-inc.com

RTV-2 Silicones Since 1974

Product Information

Preliminary Information Bulletin XT-507

Description: XT-507B is a *thixotropic paste* version of XT-500B, the RTV-2 silicone for ultra-low temperature potting, encapsulating and sealing applications. In this formulation, the crosslinker has been added to the Base to enable curing via the addition of a tin catalyst. XT-507 is excellent for cast-in-place heat shielding, thermal insulation, low and high temperature bonding and the potting and encapsulation of electrical assemblies that will be exposed to very low temperatures and where the rubber must remain in place or adhere to a vertical surface.

Mixing Directions: Mix 100 parts by weight of XT-507B with 0.5 parts by weight of XT-507A in a container that will hold 5 to 6 times the volume of the rubber. Thoroughly mix and then deaerate in a vacuum chamber capable of 28 inches of mercury vacuum. The material will expand and then collapse. Maintain the vacuum for an additional minute and then remove.

Typical Properties

Viscosity (cps):	700,000 \pm 100,000
Appearance:	White. Mild, sweet odor.
Specific Gravity:	1.35
Shelf Life:	6 months

When cured with XT-507A (Dibutyltindilaurate), the following characteristics are typical:

XT-507B	100.0	100.0
XT-507A	0.1	0.5
Working Time	2-4 hours	1-2 hours
Demold Time	16-24 hours	12-16 hours
Shore A Hardness		
After 24 Hours	40	40
After 3 Days	48	48
Tensile Strength (psi)	450 \pm 25	
Elongation (%)	150 \pm 25	
Tear, Resistance (ppi)	40 \pm 10	
Shrinkage (%)	0.65	
Specific Gravity	1.35	
Dielectric Strength (volts/mil)	470	
Dielectric Constant @ 100Hz	3.9	
Dissipation Factor @ 100Hz	0.02	
Volume Resistivity (ohms/cm)	5 x 10 ¹⁴	
Temperature Range	-175 to 400 °F	
Thermal Conductivity (W/M K)	0.31	
Coefficient of Linear		
Expansion (in/in, °F)	11 x 10 ⁻⁵	
Specific Heat (cal/gm, °C)	0.35	

The information contained in this product information sheet is based on sources believed to be accurate. It is offered in good faith, but without guarantee since the conditions of use are beyond our control. All risks of use are assumed by the user.