

CV-2948

Thermally Conductive, Controlled Volatility RTV Silicone

Product Profile

Description

- Two-part, white, thermally conductive RTV silicone
- Based on a dimethyl diphenyl silicone copolymer with a broad temperature range
- 100:0.2 Mix Ratio (Base: Curing Agent)

Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- To provide heat transfer between electrical/electronic components and their heat sinks
- Use to adhere integrated circuit substrates, base plates, heat sinks or where grooves or other configurations require a non-flowable to limited flow material

Typical Properties

	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Chemical Classification	PMQ	-	-	-
Color	White	-	-	-
Consistency	Paste	-	-	-
Work Time	2 hours	-	-	008
Cure Time @ 50% R.H., 25°C (77°F)				
Set Up	24 hours	-	-	-
Full Cure	7 days	-	-	075
Cure System	Tin Condensation	-	-	-
Cured: 7 days @ 25°C (77°F)				
Specific Gravity @ 25°C (77°F)	1.54	-	D-792	003
Durometer, Type A	70	-	D-2240	006
Tensile Strength	250 psi	1.20 MPa	D-412, D-882	007
Elongation	25%	-	D-412, D-882	007
Tear Strength	45 ppi	7.9 kN/m	D-624	009
Lap Shear Strength (primed w/ SP-120)	125 psi	0.9 MPa	D-1002	010
Thermal Conductivity	1.45 W/mK	35 x 10 ⁽⁻⁴⁾ cal/cm-sec-C	C-177	101
Collected Volatile Condensable Material (CVCM)	0.02%	-	E 595	072
Total Mass Loss (TML)	0.16%	-	E 595	072
Operating Temperature Range	-175°F to 500°F	-115°C to 260°C	-	-

Instructions for Use

Mixing

Stir base prior to weighing for curing agent addition. Thoroughly mix 100 parts base to 0.2% curing agent just prior to use.

Caution: CV-2948 curing agent may cause skin irritation. In case of eye contact, irrigate with water immediately and seek medical attention.

Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all safety precautions. Slowly apply full vacuum to a container rated for use and at least four times the volume of material being deaerated. Hold vacuum until bulk deaeration is complete.

Note: Some bonding applications may require the use of a primer. NuSil Technology SP-120 silicone primer is recommended.

Packaging

100 Gram Kit
 250 Gram Kit
 500 Gram Kit

Warranty

6 Months

Warnings About Product Safety

NuSil Technology believes that the information and data contained herein are accurate and reliable. However, the user is responsible to determine the material's suitability and safety of use. NuSil Technology cannot know each application's specific requirements and hereby notifies the user that it has not tested or determined this material's suitability or safety for use in any application. The user is responsible to adequately test and determine the safety and suitability for their application and NuSil Technology makes no warranty concerning fitness for any use or purpose. NuSil Technology has completed no testing to establish safety of use in any medical application.

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Specifications

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