

CV2-2289-1

Controlled Volatility Potting and Encapsulating Silicone Elastomer

Product Profile

Description

- Two-part, white silicone system
- 1:1 Mix Ratio (Part A:B)
- Offers medium strength, low modulus, good physical properties and a broad operating temperature range

Applications

- To provide protection of electric components and assemblies against shock, vibration, moisture, dust, chemicals and other environmental hazards
- Ideal for adhesive applications where a large surface must be covered
- For applications requiring minimal outgassing

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance, Part A	White	-	D2090	002
Appearance, Part B	Translucent	-	D2090	002
Viscosity, Part A	14,000 cP	14,000 mPas	D1084, D2196	001
Viscosity, Part B	10,500 cP	10,500 mPas	D1084, D2196	001
Tack-Free Time	20 hours	-	C679	005
Cured: 15 min @ 150°C (302°F)				
Durometer, Type A	30	-	D412, D882	007
Tensile Strength	450 psi	3.1 MPa	D412, D882	007
Elongation	250%	-	D412, D882	007
Lap Shear Strength (primed w/ CF1-135)	300 psi	2.1 MPa	D1002	010
Dielectric Strength	500 volts/mil	19.7 kV/mm	D149	-
Volume Resistivity	1x10 ¹⁵	-	D257	040
Collected Volatile Condensable Material (CVCM)	0.07%	-	E 595	072
Total Mass Loss (TML)	0.25%	-	E 595	072
Operating Temperature Range	-178°F to 500°F	-115°C to 260°C	-	-
After High Temperature Exposure:				
7 days @ 240°C (464°F)				
Tensile Strength	130 psi	0.9 MPa	D412	007
Elongation	45%	-	D412	007
Young's Modulus	350 psi	2.4 MPa	-	-
Lap Shear Strength (primed w/ SP-270)	45 psi	0.3 MPa	D1002	010
10 cycles of 5 minutes @ 300°C (572°F)				
Tensile Strength	550 psi	3.8 MPa	D412	007
Elongation	230%	-	D412	007
Young's Modulus	350 psi	2.4 MPa	-	-
Lap Shear Strength (primed w/ SP-270)	400 psi	2.8 MPa	D1002	010

Instructions for Use

Mixing

Mix Part A and B in a 1:1 mix ratio. CV2-2289-1 is ideal for Static mix and dispense application.

Vacuum Deaeration

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

Packaging

50 ml SxS Kit
 200 Gram Kit
 500 Gram Kit

Warranty

6 Months

Substrate Considerations

Cures in contact with most materials common to electronic assemblies. Exceptions include butyl and chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents. Units being encapsulated or potted should be clean and free of surface contaminants. Containers and dispensers being used should also be clean and dry. Cure inhibition can usually be prevented by washing all containers with solvent or volatilizing the contaminant by heating.

Note: Some bonding applications may require the use of a primer. NuSil Technology CF1-135 silicone primer is recommended.

Adjustable Cure Schedule

Product cures at a wide range of cure times and temperatures to accommodate different production needs. Contact NuSil Technology for details.

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.

NuSil Technology has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology products in a particular application, review the latest Material Safety Data Sheets and contact NuSil Technology with any questions about product safety information.

Do not use any chemical in a food, drug, cosmetic, or medical application or process until having determined the safety and legality of the use. The user is responsible to meet the requirements of the U.S. Food and Drug Administration (FDA) and any other regulatory agencies. Before handling any other materials mentioned in the text, obtain available product safety information and take the necessary steps to ensure safety of use.

Specifications

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

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Warranty Information

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