

EPM-2410-1

Low volatility silicone adhesive

DESCRIPTION

- Two-part, white silicone system
- Designed for enhanced performance in extreme low and high temperatures
- Offers a high tear strength
- Convenient 1:1 mix ratio (Part A: Part B)

APPLICATION

- For applications requiring low volatility
- To provide protection of electric components and assemblies against shock, vibration, moisture, dust, chemicals and other environmental hazards
- For use as an adhesive or encapsulant

PROPERTIES

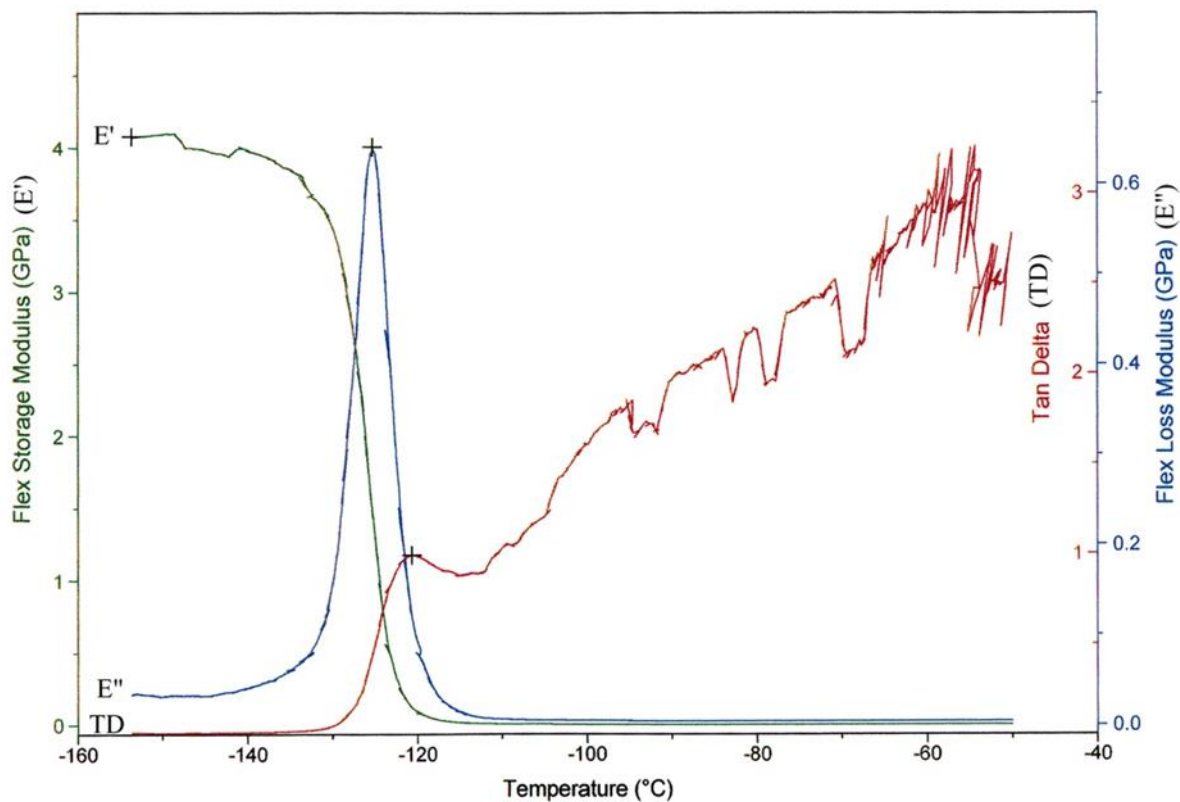
Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance*	White	ASTM D2090	002
Viscosity, Part A*	60,000 cP (60,000 mPas)	ASTM D1084, D2196	001
Viscosity, Part B*	40,000 cP (40,000 mPas)	ASTM D1084, D2196	001
Work Time*	30 minutes	-	008
Tack-Free Time*	4 hours	ASTM C679	005
Cured: 15 minutes at 150°C (302°F)			
Durometer, Type A*	30	ASTM D2240	006
Tensile Strength*	700 psi (4.8 MPa)	ASTM D412	007
Elongation*	350%	ASTM D412	007
Lap Shear Strength* (primed w/ CF1-135)	400 psi (2.8 MPa)	ASTM D1002	010
Coefficient of Linear Thermal Expansion			
Below Tg (-150°C to -115°C)	60 ppm/°C (60 μm/m/°C)	ASTM D3386	-
Above Tg (-95°C to 250°C)	445 ppm/°C (445 μm/m/°C)	ASTM D3386	-
Volatile Content (1 hour at 275°C)	0.5%	ASTM D2288	004

Typical Properties	Average Result	Standard	NT-TM
Thermal Conductivity	0.230 W/(mK) (55 x 10 ⁻⁵ cal/(cm·sec·°C))	ASTM E1530	101
Dynamic Mechanical Analysis (DMA)	See Attached Graph	ASTM D4065	-
Ionic Content, Cl	< 15 ppm	-	-
Ionic Content, K	< 1 ppm	-	-
Ionic Content, Na	< 2 ppm	-	-

* Properties tested on a lot-to-lot basis. Do not use the properties shown in this technical profile as a basis for preparing specifications. Please [contact](#) NuSil Technology for assistance and recommendations in establishing particular specifications.

DYNAMIC MECHANICAL ANALYSIS (DMA) ASTM D-4065-01

	Tg	Initial E'	Final E' (Gpa)	Tan Delta above Tg
EPM-2410-1	-125°C	4.0 Gpa	0.001 Gpa	2 - 25



INSTRUCTIONS FOR USE

Mixing

Thoroughly stir Part A prior to weighing for Part B addition as the product separates. Mix Part A and Part B in a 10:1 mix ratio by weight, just prior to use.

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's CF1-135 is recommended.

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.

Adjustable Cure Schedule

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

ROHS AND REACH COMPLIANCE

Please [contact](#) NuSil Technology's Regulatory Compliance department with any questions or for further assistance

SPECIFICATIONS

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WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC (hereinafter "NuSil Technology") is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides a specific written

Packaging

50 mL SxS Kit
500 Gram Kit

Warranty

12 Months

warranty of fitness for a particular use, NuSil Technology's sole warranty is that the product will meet NuSil Technology's then current specification. NuSil Technology specifically disclaims all other expressed or implied warranties, including, but not limited to, warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology expressly disclaims any liability for incidental or consequential damages.

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NuSil Technology believes, to the best of its knowledge, that the information and data contained herein are accurate and reliable. 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 Sheet 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, the user is advised to obtain available product safety information and take the necessary steps to ensure safety of use.

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