ADVANCED ENGINEERING

EPM-2410

LOW VOLATILITY SILICONE ELASTOMER

DESCRIPTION

- Two-part, translucent silicone system
- Offers low modulus
- 1:1 Mix Ratio (Part A: Part B)
- RoHS compliant

APPLICATION

- For applications requiring low volatility and high purity
- Designed for protection of electrical components and assemblies against shock, vibration, moisture, dust, chemicals, and other environmental hazards
- Ideal for applications in which physical strength is important

PROPERTIES

TYPICAL PROPERTIES	**AVERAGE RESULT**	**STANDARD**	**NT-TM**
Uncured:			
Appearance	Translucent	ASTM D2090	002
Viscosity, Part A	62,000 cP (62,000 mPas)	ASTM D1084, D2196	001
Viscosity, Part B	40,000 cP (40,000 mPas)	ASTM D1084, D2196	001
Work Time	30 minutes	-	008
Cured: 15 minutes at 150°C (302°F)			
Durometer, Type A	30	ASTM D2240	006
Tensile Strength	750 psi (5.2 MPa)	ASTM D412	007
Elongation	350%	ASTM D412	007
Lap Shear Strength	400 psi (2.8 MPa)	ASTM D1002	010
Volatile Content (1 hour at 275°C)	0.5%	ASTM D2288	004
Moisture Absorption	0.07%	JEDEC J-STD-020C	202
Volume Resistivity	1.0 X Ohm 10exp[13] cm	ASTM D257	153
Dielectric Strength	580 V/mil (22.62 kV/mm)	ASTM D149	-
Dielectric Constant, 100 Hz	2.9	ASTM D150, D924	906

TYPICAL PROPERTIES	AVERAGE RESULT	STANDARD	NT-TM
Dielectric Constant, 1 kHz	2.9	ASTM D150, D924	906
Loss Tangent, 100 Hz	0.0003	ASTM D150, D924	906
Loss Tangent, 1 kHz	0.0003	ASTM D150, D924	906
Coefficient of Linear Expansion	28 µm/(m°C)	ASTM E831	-
Glass Transition Temperature (Tg) (-70°C to 200°C)	-117°C (-178.6°F)	ASTM D3418	-
Ionic Content, Na	< 6 ppm	MIL-STD-883	-
Ionic Content, K	< 3 ppm	MIL-STD-883	-
Ionic Content, Cl	< 6 ppm	MIL-STD-883	-

The above properties are tested on a lot-to-lot basis. Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

INSTRUCTIONS FOR USE

Mixing and Vacuum Deaeration

Combine Part A and Part B in a 1:1 mix ratio prior to use. Airless mixing, metering or dispensing equipment is recommended for production operations. If mixing by hand, take care to minimize air entrapment.

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply full vacuum to a suitable container of at least four times the volume of material being de-aired. Hold vacuum until bulk deaeration is complete. For further information please see Mixing and De airing Addition Cure Silicones.

Packaging

50 mL Side-by-Side Kit
400 mL Side-by-Side Kit

Warranty

6 Months

Substrate Considerations

EPM-2410 cures in contact with most materials common to electronic assembles. Exceptions include butyl and chlorinated rubbers, some Tin condensation cure silicones and unreacted residues of some curing agents. Units being encapsulated or potted should be clean and free of surface contaminates. Containers and dispensers being used should also be clean and dry. Cure inhibition can usually be prevented by washing all containers with solvent or volatizing the contaminant by heating. For further information please see Avoiding Cure Inhibition.

Note: Some bonding application may require the use of a primer. NuSil Technology's CF1-135 silicone primer is recommended. For further information please see Choosing a Silicone Primer / Adhesive System for Engineering Applications.

Adjustable Cure Schedule

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

RoHS AND REACh COMPLIANCE

EPM-2410 is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) regulation contained in Article 4(1) of the European Parliament and Council's Directive 2002/95/EC. RoHS mandates that manufacturers restrict the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polychlorinated biphenyls, and polybrominated diphenyl ethers in electrical and electronic equipment.

EPM-2410 is compliant with the Registration, Evaluation, and Authorization of Chemicals (REACh) regulation (European Union 1907/2006). EPM-2410 does not contain any of the chemicals identified as Substances of Very High Concern (SVHC) by the European Chemicals Agency (ECHA), which oversees REACh compliance.

Please contact NuSil Technology's Regulatory Compliance department with any questions or for further assistance.

SPECIFICATIONS

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.

WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC (hereinafter "NuSil Technology") is 6 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides a specific written 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.

PATENT / INTELLECTUAL PROPERTY WARNING

NuSil Technology disclaims any expressed or implied warranty against the infringement of any domestic or international patent/intellectual property right. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any domestic or international patent/intellectual property right covering the product itself, its use in combination with other products, or its use in the operation of any process.

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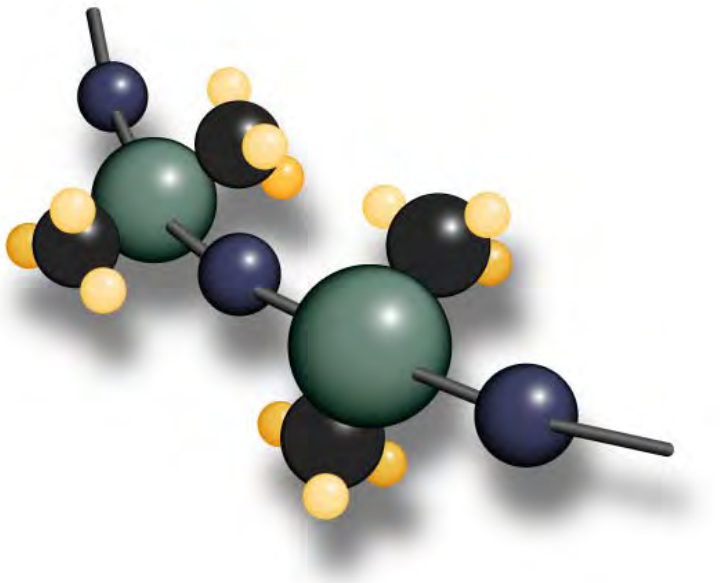

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