

EPM-2496

Low volatility thermally conductive silicone potting elastomer

DESCRIPTION

- Two part, Gray, 1:1 Mix ratio (A:B)
- Pourable and self-leveling
- Cures at room temperature

APPLICATION

- For applications requiring low volatility under extreme operating conditions to avoid contamination in sensitive devices
- Eliminates need for extra heating steps for removing volatiles after cured in device
- Quick set-up and fast ambient cure schedule
- Enhanced thermal conductivity for removal of heat and improved reliability
- Low viscosity allows the potting of complex geometries without the entrapment of air
- Applications include: potting for sensors, relays, and other electronic components requiring protection from vibration and generally harsh environmental conditions

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	Gray	ASTM D2090	002
Viscosity, Part A	5,000 cP (mPas)	ASTM D1084, D2196	001
Viscosity, Part B	3,500 cP (mPas)	ASTM D1084, D2196	001
Work Time*	25 minutes	-	008
Cured: 24 hours minimum at ambient temperature and humidity			
Durometer, Type A	60	ASTM D2240	006
Cured: 10 minutes at 150 +/- 5°C			
Specific Gravity*	1.5	ASTM D792	003
Durometer, Type "A"	65	ASTM D2240	006

Typical Properties	Average Result	Standard	NT-TM
Tensile Strength*	700 psi (4.82 MPa)	ASTM D412	007
Elongation*	115%	ASTM D412	007
Volatile Content (1 hour at 275°C)*	0.5%	ASTM D2288	004
Thermal Conductivity	0.50 W/(mK)	ASTM E 1530	101

*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.

INSTRUCTIONS FOR USE

Mixing

EPM-2496 contains dense fillers that settle over time. Prior to mixing Part A and B together, thoroughly stir the Part A to ensure the fillers are homogeneously dispersed. Mix Part A and Part B in a 1:1 mix ratio by weight, just prior to use. Due to the short pot life (work time) of EPM-2496, it is recommended to use airless mixing such as dual cartridge dispensing units (sxs kits) for bench top or low volume production to reduce trapped air. Mix and metering or dispensing equipment is recommended for production operations. For further information please see [Mixing and De-airing Addition Cure Silicones](#).

Vacuum Deaeration

A vacuum chamber should be used to remove the air introduced during mixing. When working with equipment at reduced pressures, ensure container and chamber are rated to withstand the supplier's recommended operational pressure. Reference Material Certification for "Work Time" to determine time between mixing and applying to application. Place mixed material into appropriate container and fill approximately one quarter of the container's total volume to allow material to rise. Slowly apply vacuum up to approximately 28 in. Hg. Hold vacuum until bubbles are no longer observed forming. Breaking the seal while pulling vacuum will allow bubbles to burst, expediting the process. It is not recommended to remove air via centrifuging.

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, exceptions include: sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

Packaging

50 mL Side-by-Side Kit (54 grams)
 200 mL Side-by-Side Kit
 2 Pint Kit (910 grams)
 2 Gallon Kit (7,280 grams)

Warranty

6 Months

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

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 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

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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](#)

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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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