

# EPM-2412

## Low volatility silicone elastomer

### DESCRIPTION

- 1:1 Mix ratio (Part A: Part B), Platinum addition cure
- Controlled Aspect Ratio independent of dispensing pressure
- Translucent
- Cures at room temperature
- Low Volatility

### APPLICATION

- Applications that require non-slumping material
- Cures quickly to form cure in place gasket in device
- Can be easily removed after cure to reduce rework time
- Leaves minimal to no residue once removed
- Easily dispensed and consistent aspect ratio
- Suitable for mix and meter equipment

### PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
<b>Uncured:</b>			
Appearance	Translucent	ASTM D2090	002
Extrusion Rate *, Part A	0.08 g/min	ASTM C603	033
Extrusion Rate *, Part B	0.08 g/min	ASTM C603	033
Work Time (Time for viscosity to double)	20 minutes	-	124
<b>Cured: 24 hours minimum at ambient temperature and humidity</b>			
Durometer, Type A	30	ASTM D2240	006
Tensile Strength	850 psi (6.4 MPa)	ASTM D412	007
Elongation	450 %	ASTM D412	007
Aspect Ratio	0.8 minimum	-	327
Volume Resistivity	$> 1 \times 10^{-14}$ ohm-cm	ASTM D257, D4496	040
Thermal Conductivity	0.18 W/mK (0.0004 cal/(cm·sec·°C))	ASTM E1530	101
Dielectric Strength	530 V/mil (20.6 kV/mm)	ASTM D149	243
Dielectric Constant, 100 Hz	2.8	ASTM D150	354
Dielectric Constant, 1 kHz	2.8	ASTM D150	354

Typical Properties	Average Result	Standard	NT-TM
Dissipation Factor, 100 Hz	0.0014	ASTM D150	354
Dissipation Factor, 1 kHz	0.0004	ASTM D150	354
Coefficient of Linear Thermal Expansion	310 (µm/(m°C))	ASTM E831	---
Compressibility at 25° C (% Recovery)	10	ASTM D395	65

The test data shown for this material is the average value for typical properties. All of these properties may not be tested on a lot to lot basis and cannot be used to draft specifications. Please [contact](#) NuSil® for assistance and recommendations in establishing limits for product specifications.

\* Performed using a Semco model 250-A pneumatic gun with a 21 gauge, 0.5" (1.3 mm) needle and 90 +/- 5 psi (0.6 MPa) air pressure.

## INSTRUCTIONS FOR USE

### Mixing and Vacuum Deaeration

Due to the short pot life (work time) of EPM-2412, 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](#). EPM-2412 can be dispensed through up to 21 gauge needle.

### Substrate Considerations

EPM-2412 cures in contact with most materials common to electronic assemblies. Exceptions include butyl and chlorinated rubbers, some Tin condensation cure silicones and unreacted residues of some curing agents such as amines from epoxies. Units where EPM-2412 is applied 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. For further information please see [Avoiding Cure Inhibition](#).

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

## ROHS AND REACH COMPLIANCE

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

### Packaging

50 mL SxS Kit (0.054 kg)  
 200 mL SxS Kit (0.21 kg)  
 400 mL SxS Kit (0.42 kg)  
 2 Pint Kit (0.91 kg)  
 10 Gallon Kit (36.4 kg)

### Warranty

12 Months

## SPECIFICATIONS

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please [contact](#) NuSil for assistance and recommendations in limits for product specifications.

## WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil provides a specific written warranty of fitness for a particular use, NuSil's sole warranty is that the product will meet NuSil's then current specification. NuSil 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's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be

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NuSil 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 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 makes no warranty concerning fitness for any use or purpose. NuSil has completed no testing to establish safety of use in any medical application.

NuSil has tested this material only to determine if the product meets the applicable specifications. (Please [contact](#) NuSil for assistance and recommendations when establishing specifications.) When considering the use of NuSil products in a particular application, review the latest Material Safety Data

Sheet and [contact](#) NuSil 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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