

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
Uncured:			
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
Cured: 24 hours minimum at ambient temperature and humidity			
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	---
*Glass Transition Temperature (Tg)	- 50 °C (-58 °F)	ASTM E831	---
*Compressibility at 25° C (% Recovery)	10	ASTM D395	65

*Properties NOT 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.

** 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 Technology'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 Technology's Regulatory Compliance department with any questions or for further assistance

Packaging

50 mL Side-by-Side Kit
 200 mL Side-by-Side Kit
 400 mL Side-by-Side Kit
 2 Pint Kit (910 g)
 10 Gallon Kit (36.4 kg)

Warranty

12 Months

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.

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