

EPM2-2412

RTV addition cure silicone adhesive

DESCRIPTION

- Two Part, Translucent, 1:1 Mix ratio (A:B)
- Non-slump and is easily dispensed
- No curing byproducts such as acetic acid or methyl alcohol

APPLICATION

- Adhesives for bonding and sealing silicones to each other and other substrates such as metals and plastics such as polycarbonate, and PET.
- Protects electrical components and assemblies against shock, vibration, moisture, dust, chemicals, and other environmental hazards

PROPERTIES

| Typical Properties | Average Result | Standard | NT-TM |
|-----------------------------------|---------------------|------------|-------|
| Uncured: | | | |
| Appearance | Opaque [^] | ASTM D2090 | 002 |
| Viscosity, Part A* | Paste | - | |
| Viscosity, Part B* | Paste | - | |
| Extrusion Rate **, Part A | 0.05 g/min | ASTM C603 | 033 |
| Extrusion Rate **, Part B | 0.04 g/min | ASTM C603 | 033 |
| Work Time | 2 hours | - | 008 |
| Cured: 10 minutes at 116°C | | | |
| Specific Gravity | 1.09 | ASTM D792 | 003 |
| Durometer, Type A | 28 | ASTM D2240 | 006 |
| Tensile Strength | 830 psi (5.7 MPa) | ASTM D412 | 007 |
| Elongation | 540 % | ASTM D412 | 007 |
| Tear | 90 ppi (15.8 kN/m) | ASTM D624 | 009 |

*These properties NOT tested on a lot-to-lot basis. 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.

[^] Uncured appearance can vary lot to lot however EPM2-2412 cures translucent.

INSTRUCTIONS FOR USE

Processing

For small or laboratory scale production, NuSil recommends dispensing using side by side kit packaging (i.e. 50 ml cartridge) or mix and meter equipment for larger scale production due to the pot life and high viscosity of the material. If mix meter or dual cartridge equipment are unavailable, EPM2-2412 will require de-airing due to trapped air. NuSil recommends verification of the work time of the material prior to mixing and observation of all applicable safety precautions. Slowly apply vacuum, up to 28 inches Hg, to a container rated for use and of volume at least four times that of material being deaerated.

Apply the vacuum while observing the uncured fluid for presence of bubble formation and increase vacuum slowly enough to avoid rapid foaming. Hold vacuum until presence of air is no longer evident. For more information visit

www.nusil.com and review "[Mixing and De-airing Addition Cure Silicones](#)" in our technical resources

Substrate Considerations

EPM2-2412 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. 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. For further information please see [Avoiding Cure Inhibition](#).

Some bonding applications may require the use of a primer. CF2-135 is recommended for most metallic substrates, some plastics and when cure inhibition is observed on substrate. SP-270 is recommended for other substrates, such as some plastics, that are difficult to adhere to.

Substrates should be free of dust, oil, and fingerprint soils. Clean substrates using suitable industrial techniques for cleaning devices substrate. If using hydrocarbon solvent cleaning (e.g. acetone, toluene), a final rinse with reagent grade isopropanol is recommended. If using aqueous detergent cleaning, multiple final rinses with de-ionized water or a single rinse with reagent grade isopropanol is recommended. Adhesion to fluoroplastic substrates is generally poor but may be improved with chemical etching or plasma etching of the substrate

Packaging

50 mL Side-by-Side Kit
200 mL Side-by-Side Kit
400 mL Side-by-Side Kit
2 Pint Kit (910 g)
2 Gallon Kit (7.28 kg)
10 Gallon Kit (36.4 kg)

Warranty

9 Months

ROHS AND 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.

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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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