R2-6755

Clear silicone elastomer

DESCRIPTION

- Three-part, optically clear, pourable silicone system
- 1:1:0.1 Mix Ratio (Part A:B:C)
- Incorporates an adhesion promoter to help adhere to polycarbonate and other difficult substrates
- Offers excellent physical properties and a broad operating temperature range

APPLICATION

- As an adhesive or encapsulant for applications requiring optical clarity and a 1.46 refractive index
- Use as an optical coupling agent, as a lens sealing material, or for other photonics applications including HBLED's, photo detectors, lasers, discrete optics and flat panel displays

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	Translucent	ASTM D2090	002
Viscosity, Part A	48,500 cP	ASTM D1084, ASTM D2196	001
Viscosity, Part B	40,000 cP	ASTM D1084, ASTM D2196	001
Viscosity, Part C	1,350 cP	ASTM D1084, ASTM D2196	001
Refractive Index	1.46	ASTM D1747, ASTM D1218	018
Volatility	0.8 %	ASTM D2288	004
Tack-Free Time	1 hour	ASTM C679	005
Cured: 30 minutes at 150°C (302°F)			
Specific Gravity	1.14	ASTM D792	003
Durometer, Type A	20	ASTM D2240	006
Tensile Strength	550 psi (3.79 MPa)	ASTM D412	007
Elongation	325 %	ASTM D412	007
Stress at 100% strain	70 psi (0.48 MPa)	ASTM D412	007
Tear Strength	25 ppi (4.41 kN/m)	ASTM D624	009

INSTRUCTIONS FOR USE

Mixing

Mix in a ration of 1:1:0.1, Part A: Part B: Part C. If mixing by hand, take care to minimize air entrapment while mixing.

Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing 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. Hold vacuum until presence of air is no longer evident.

Substrate Consideration

Cures in contact with most materials common to electronic assemblies. Exceptions include butyl and chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents. Units being encapsulated or potted should be clean and free of surface contaminants. Containers and dispensers should also be clean and dry. Prevent cure inhibition by washing all containers with clean solvent or volatizing the contaminants by heat.

Note: Some bonding applications may require the use of a primer. NuSil Technology LLC CF1-135 silicone primer is recommended.

Adjustable Cure Schedule

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

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 12 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.

Packaging	Warranty
50 Gram Kit 2 Pint Kit (958 g) 2 Gallon Kit (7.65 kg)	12 Months

WARNINGS ABOUT PRODUCT SAFETY

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.

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