

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

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, 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	1.5 % Maximum	ASTM D2288	004
Tack-Free Time at 50°C (122°F)	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

Typical Properties	Average Result	Standard	NT-TM
Stress at 100% strain	70 psi (0.48 MPa)	ASTM D412	007
Tear Strength	25 pli (4.41 kN/m)	ASTM D624	009

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.

INSTRUCTIONS FOR USE

Mixing

Mix in a ratio 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.

Note: Some bonding applications may require the use of a primer. NuSil 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 for details.

Packaging

50 Gram Kit (0.051 kg)
2 Pint Kit (0.958 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 establishing 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 other than as warranted. NuSil expressly disclaims any liability for incidental or consequential damages.

WARNINGS ABOUT PRODUCT SAFETY

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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