

# CF1-6755

## Tough, optically clear silicone elastomer

### DESCRIPTION

- Two-part, optically clear, silicone system that pours
- Cures at room temperature or rapidly with heat
- Offers good physical properties and a broad operating temperature range
- 1:1 Mix Ratio (Part A: Part B)

### APPLICATION

- As an adhesive or encapsulant for applications requiring optical clarity
- Excellent as an optical coupling agent or lens sealing material

### PROPERTIES

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
<b>Uncured:</b>				
Appearance	Translucent	-	ASTM D2090	002
Viscosity, Part A	40,000 cP	40,000 mPas	ASTM D1084, D2196	001
Viscosity, Part B	35,000 cP	35,000 mPas	ASTM D1084, D2196	001
Work Time	2 hours minimum	-	-	008
<b>Cured: 30 min at 150°C (302°F)</b>				
Specific Gravity	1.14	-	ASTM D792	003
Durometer, Type A	30	-	ASTM D2240	006
Tensile Strength	675 psi	4.7 MPa	ASTM D412, D882	007
Elongation	275%	-	ASTM D412, D882	007
Tear Strength	40 pli	7.1 kN/m	ASTM D624	009
Young's Modulus	425 psi	2.9 MPa	-	-
Refractive Index	1.46	-	ASTM D1747, D1218	018
Operating Temperature Range	-178°F to 500°F	-115°C to 260°C	-	-

## INSTRUCTIONS FOR USE

### Mixing

Mix in a 1:1 ratio Part A to Part B, taking care to minimize air entrapment during 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 being used should also be clean and dry. Cure inhibition can usually be prevented by washing all containers with clean solvent or volatilizing the contaminants by heating.

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

### Adjustable Cure Schedule

Product cures at a wide range of cure times and temperatures to accommodate different production needs. [Contact](#) NuSil Technology for details. Some cure schedules\* include:

65°C (149°F)

15 minutes

100°C (212°F)

2 minutes

\* Cure time defined as the time required for a knife coat layer ~0.02" to be removed from a release liner

## 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.

### Packaging

50 Gram Kit  
50 ml SxS Kit  
400 ml SxS Kit  
2 Pint Kit (910 g)  
2 Gallon Kit (7.28 kg)  
10 Gallon Kit (36.4 kg)

### Warranty

12 Months

## 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.

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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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