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UK & Ireland Distributor



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CF1-6755

Tough, Optically Clear Silicone Elastomer

Product Profile

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)

Applications

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

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

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

6 Months

Adjustable Cure Schedule

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

Warnings About Product Safety

NuSil Technology believes the information and the data contained herein are accurate and reliable. However, 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 Sheets 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, obtain available product safety information and take the necessary steps to ensure safety of use.

Specifications

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

Patent Warning

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Warranty Information

NuSil Technology's warranty period is 6 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 any other expressed or implied warranty, including 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.