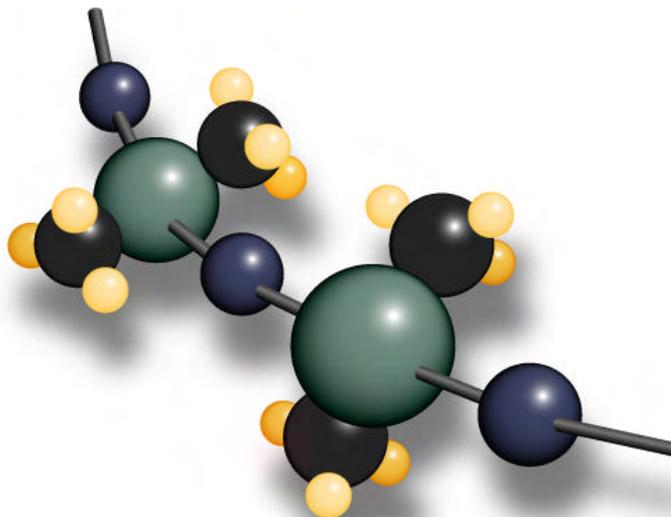


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LS1-6943

Optical Thermoset

Product Profile



NuSil Technology
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14 Kendrick Road, Unit #2
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Description

- Solvent-free, low viscosity, clear, two-part silicone elastomer
- Accelerated cure rate with heat
- Based on a dimethyl diphenyl silicone copolymer
- Radiation tolerant
- 10:1 Mix Ratio (Part A:B)

Applications

- For bonding, casting or injection molding of high performance optical components
- Formulated for extreme temperature applications
- For applications requiring index matching at 1.43

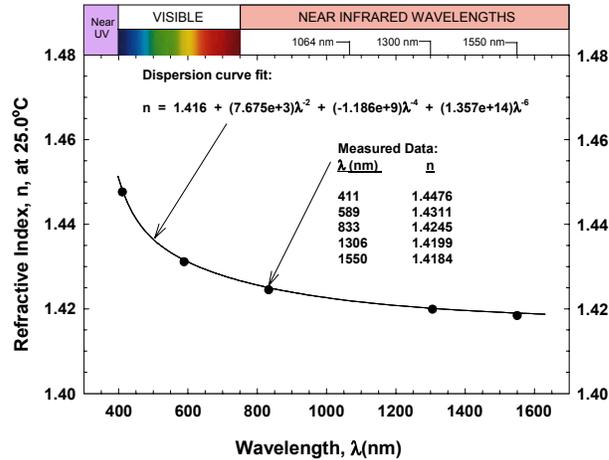
| Typical Properties | Result | Metric Conv. | ASTM | NT-TM |
|--------------------------------------|-----------------------------|---------------|--------------|-------|
| Uncured: | | | | |
| Appearance | Clear | - | - | - |
| Viscosity | 4,000 cP | 4,000 mPas | D1084, D2196 | 001 |
| Work Time | 10 min | - | - | 008 |
| Cure System | Pt Addition | - | - | - |
| Cured: 10 min @ 150°C (302°F) | | | | |
| Operating Temperature Range | -178 to 500°F | -115 to 260°C | - | - |
| Specific Gravity | 1.00 | - | D792 | 003 |
| Durometer, Type 00 | 65 | - | D2240 | 006 |
| Tensile Strength | 45 psi | 0.31 MPa | D412, D882 | 007 |
| Elongation | 130 % | - | D412, D882 | 007 |
| Dielectric Strength | 500 volts/mil | 19.7 kV/mm | D149 | - |
| Volume Resistivity | 1 x 10 ¹⁵ ohm-cm | - | D257 | 040 |
| Refractive Index | 1.43 | - | D1747, D1218 | 018 |
| Refractive Index vs. Wavelength | See chart | - | - | - |
| Optical Absorption vs. Wavelength | See chart | - | - | - |

Form number

Lightspan is a Registered Trademark of NuSil Technology

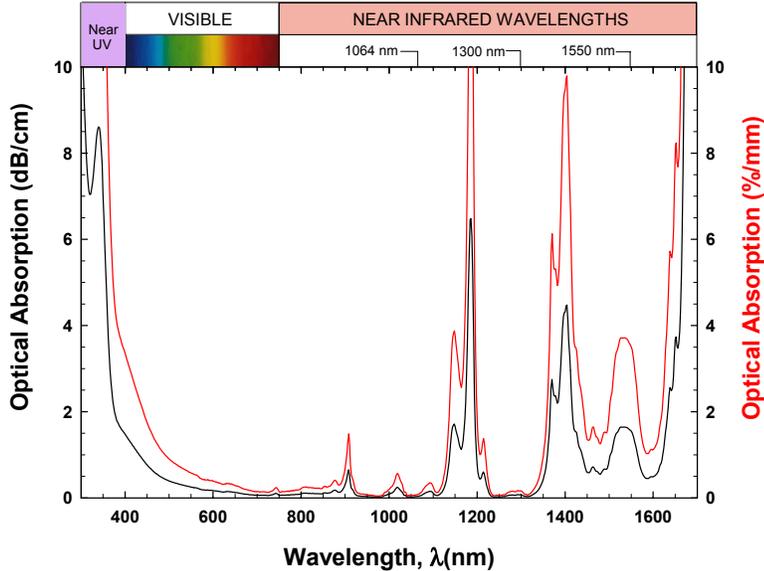
Refractive Index vs. Wavelength (25°C)

Lightspan Encapsulation Gel
LS1-6943, Lot# 40902



Optical Absorption vs. Wavelength (25°C)

Lightspan Encapsulation Gel
LS1-6943 Lot# 40902



Instructions for Use

Mixing

Thoroughly mix in a 10:1 ratio by weight Part A to Part B, just prior to use. Take 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 containing organic tin and/or amines and unreacted residues of some curing agents.

Note: Some bonding applications may require the use of a primer. NuSil Technology LS1-6943 is recommended.

Packaging

37 ml SxS Kit
250 ml SxS Kit
1 Pint Kit (505 g)
1 Gallon Kit (4.04 kg)
5 Gallon Kit (20.02 kg)

Warranty

6 Months

Adjustable Cure Schedule

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

Warnings About Product Safety

NuSil Technology believes that the information and 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

NuSil Technology disclaims any expressed or implied warranty against the infringement of any patent. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any United States' or other country's patents covering the product itself, its use in combination with other products or its use in the operation of any process.

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.