

Polymer Systems Technology Limited

UK & Ireland Distributor



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LS-3354

Optically Clear Encapsulation Gel

NuSil Technology LLC
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An ISO 9001 and AS9100
Certified Company

Description

- High purity, optically clear, soft silicone gel
- Medium viscosity components can be blended in a convenient 1:1 ratio by weight or volume
- Cures at room temperature in 24 hours
- 1.54 refractive index
- Good UV Resistance

Applications

- For potting, encapsulating, backfilling, and dampening applications requiring a soft gel with optical clarity
- Viscosity makes excellent for dispersing phosphors to obtain high brightness white light
- For applications requiring an operating temperature range of -40°C to 200°C (-40°F to 392°F) or for soldering operations up to 260°C (500°F) for 1 to 2 minutes.

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance	Transparent	-	D2090	002
Viscosity (mixed)	5,400 cP	5,400 mPas	-	124
Work Time (2x viscosity)	1.5 hours min.	-	-	124
Cured: 1 hour @ 70°C (158°F)				
Consistency	Soft gel	-	-	-
Durometer, Type 000	65	-	D2240	006
Refractive Index, 589 nm	1.54	-	D1218	018
Refractive Index vs. Temperature, 589 nm	$-4.03 \times 10^{-4}/^{\circ}\text{C}$	-	D1218	018
Optical Absorption vs. Wavelength	See chart	-	-	-
Refractive Index vs. Wavelength	See chart	-	-	-
Refractive Index vs. Temperature	See Chart	-	-	-
Cured: 24 hours at ambient temp. and humidity				
Durometer, Type 000	65	-	D2240	006

Instructions for Use

Thoroughly mix Part A with Part B in a 1:1 mix ratio by weight or volume. Deviations from the 1:1 mix ratio may change cure rates. Airless mixing, metering and dispensing equipment are recommended for production processing.

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 Considerations

Cures in contact with most materials, exceptions include: butyl and chlorinated rubber, some RTV silicones and unreacted residues of curing agents used with a few types of plastics.

Note: Some bonding applications may require the use of a primer. NuSil Technology LLC LS1-3200 silicone primer is recommended.

Packaging

20 Gram Kit
50 Gram Kit
50 ml SxS Kit
2 Pint Kit (910 g)

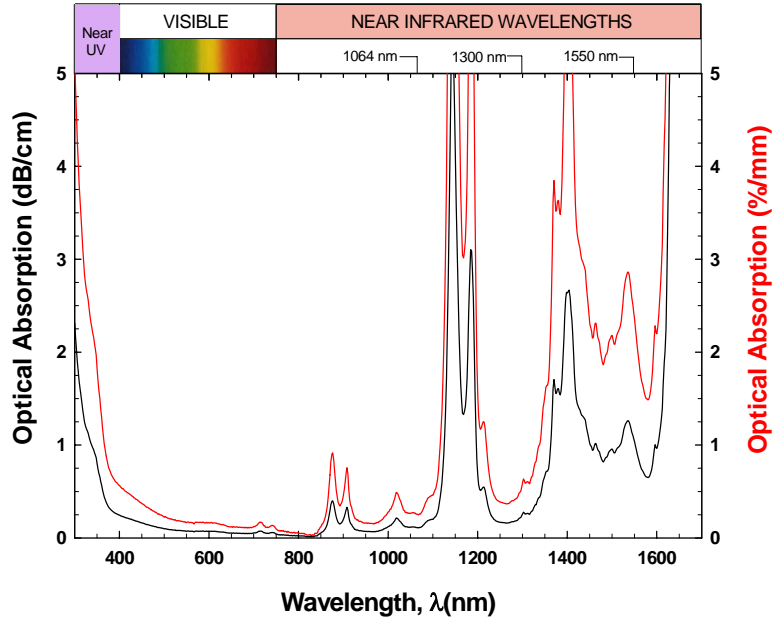
Warranty

6 Months

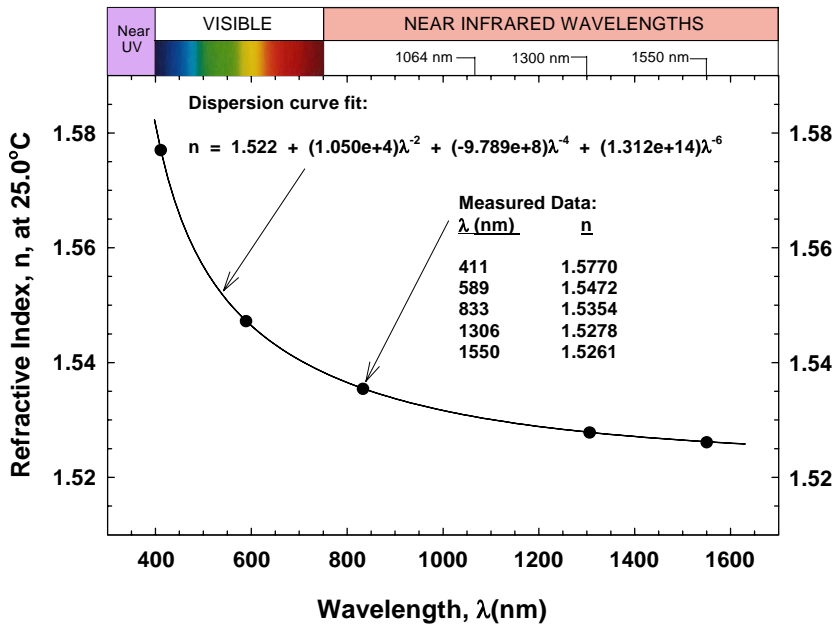
Adjustable Cure Schedule

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

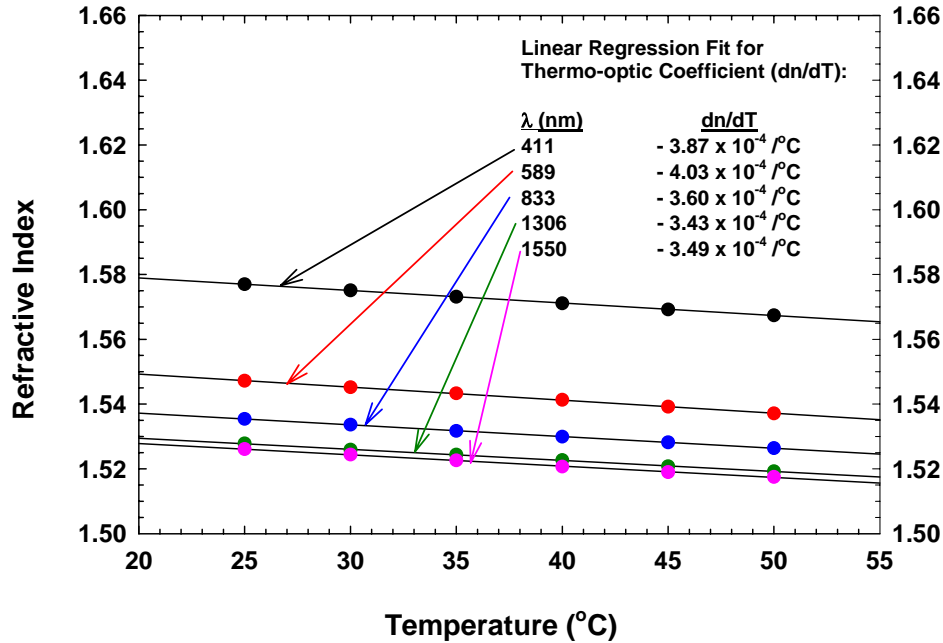
Optical Absorption vs. Wavelength (25°C) NuSil Silicone Gel LS-3354



Refractive Index vs. Wavelength (25°C) NuSil Silicone Gel



Refractive Index vs. Temperature 5 λ 's
NuSil Silicone Gel
 LS-3354



Warnings About Product Safety

NuSil Technology LLC 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 LLC 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 LLC makes no warranty concerning fitness for any use or purpose. NuSil Technology LLC has completed no testing to establish safety of use in any medical application.

NuSil Technology LLC has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology LLC for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology LLC products in a particular application, review the latest Material Safety Data Sheets and contact NuSil Technology LLC 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 LLC for assistance and recommendations in establishing particular specifications.

Patent Warning

NuSil Technology LLC disclaims any expressed or implied warranty against the infringement of any patent. NuSil Technology LLC 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 LLC's warranty period is 6 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology LLC provides a specific written warranty of fitness for a particular use, NuSil Technology LLC's sole warranty is that the product will meet NuSil Technology LLC's then current specification. NuSil Technology LLC specifically disclaims any other expressed or implied warranty, including warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology LLC'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 LLC expressly disclaims any liability for incidental or consequential damages.