

# LS3-3354

## Optically clear primerless adhesive silicone gel

### 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
- Good adhesion without the use of primer

### APPLICATION

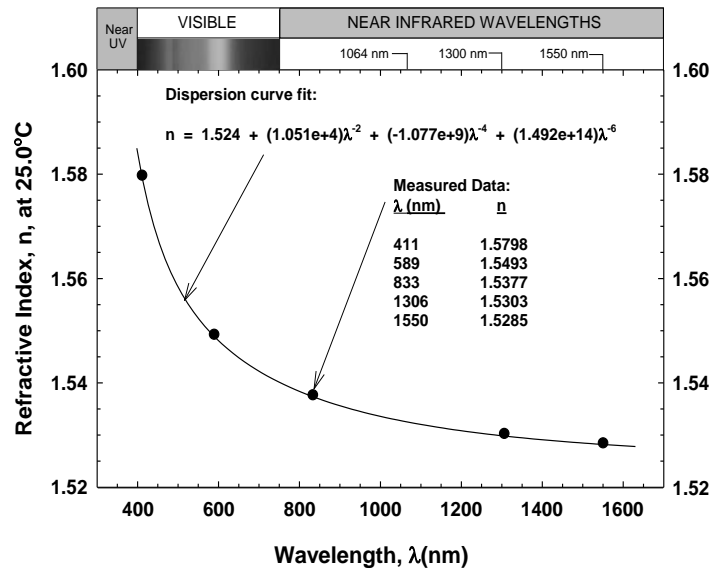
- For potting, encapsulating, backfilling, and dampening applications requiring a soft gel with optical clarity
- Viscosity is excellent for dispersing phosphors to obtain high brightness white light
- For applications requiring an operating temperature range of -40°C to 200°C (-40°F to 392°F) or for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

### PROPERTIES

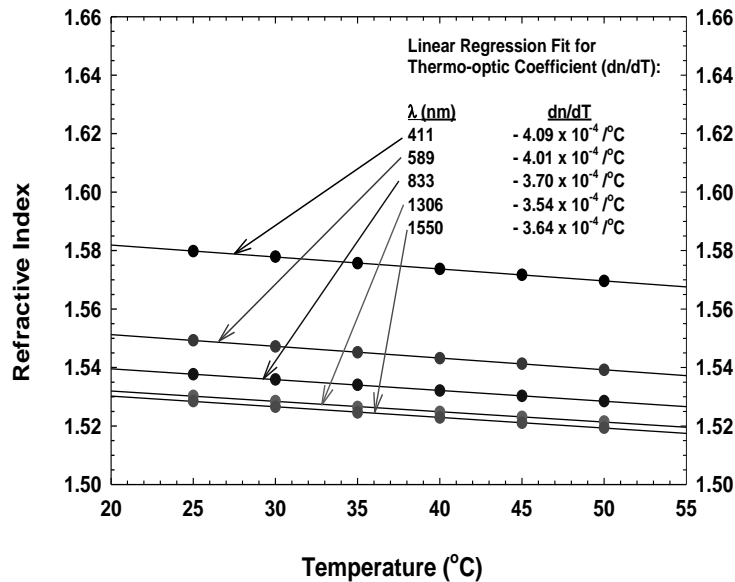
Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
<b>Uncured:</b>				
Appearance	Transparent	-	ASTM D2090	002
Viscosity (mixed)	5,200 cP	5,200 mPas	-	124
Work Time (2x viscosity)	80 minutes minimum	-	-	124
<b>Cured: 1 hour at 70°C (158°F)</b>				
Consistency	Soft gel			
Durometer, Type 000	60	-	ASTM D2240	006
Refractive Index, 589 nm	1.54	-	ASTM D1218	018
Refractive Index vs. Temperature, 589 nm	-4.01 x 10 <sup>-4</sup> /°C	-	ASTM D1218	018
Refractive Index vs. Wavelength	See chart	-	-	-
Refractive Index vs. Temperature	See chart	-	-	-

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
Cured: 24 hours at ambient temperature and humidity				
Durometer, Type 000	55	-	ASTM D2240	006

Refractive Index vs. Wavelength  
NuSil Silicone Gel  
LS3-3354



Refractive Index vs. Temperature, 5  $\lambda$ 's  
NuSil Silicone Gel  
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## 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.

### Vacuum Deaeration

Removed 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, exceptions include: butyl and chlorinated rubber, some RTV silicones and unreacted residues of curing agents used with a few types of plastics.

### 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.

## OPERATING TEMPERATURE

The operating temperature range of a silicone in any application is dependent on many variables, including but not limited to: temperature, time of exposure, type of atmosphere, exposure of the material's surface to the atmosphere, and mechanical stress. In addition, a material's physical properties will vary at both the high and low end of the operating temperature range. This type of silicone typically remains flexible at extremely low temperatures and has been known to perform at -50°C (-58°F) as well as resist breakdown at elevated temperatures up to 200°C (392°F). The user is responsible to verify optical and mechanical performance of a material in a specific application.

## 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

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

### 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.

## WARNINGS ABOUT PRODUCT SAFETY

NuSil Technology 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 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 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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