

# GEL1-8155

High purity dielectric, firm silicone gel

## DESCRIPTION

- High purity, optically clear, firm silicone gel
- Two medium viscosity components blend easily in a convenient 1:1 ratio by weight or volume

## APPLICATION

- For potting, encapsulating, backfilling, and dampening applications requiring a firm gel with optical clarity
- Recommended for use with automatic dispense systems

## PROPERTIES

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
<b>Uncured:</b>				
Appearance	Translucent	-	ASTM D2090	002
Viscosity	14,500 cP	14,500 mPas	ASTM D1084, D2196	001
<b>Cured: 30 min at 150°C (302°F)</b>				
Penetration*	0.4 mm	-	ASTM DC-CTM 813	017
Operating Temperature Range	-85 to 392°F	-65 to 200°C	-	-

\* GCA Precision Penetrometer, 19.5 gram shaft, 1/4" diameter, 15 seconds.

## INSTRUCTIONS FOR USE

### Mixing

Thoroughly mix Part A with Part B in a 1:1 mix ratio by weight or volume. Increase the ratio of Part A to Part B in the initial mix for a softer gel (high penetration value) and increase the ratio of Part B to Part A for a firmer gel (lower penetration value). Deviations from the 1:1 mix ratio may change cure rates. Airless mixing, metering and dispensing equipment is 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.

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. Cure schedules include:

<u>25°C</u>	<u>50°C</u>	<u>75°C</u>
24 hours	4 hours	40 minutes

## 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.

## 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

### Packaging

50 Gram Kit  
2 Pint Kit (910 g)  
500 Gram Kit

### Warranty

12 Months

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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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