Polymer Systems Technology Limited

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NuSil SILICONE TECHNOLOGY®
Creative Partners in a Material World

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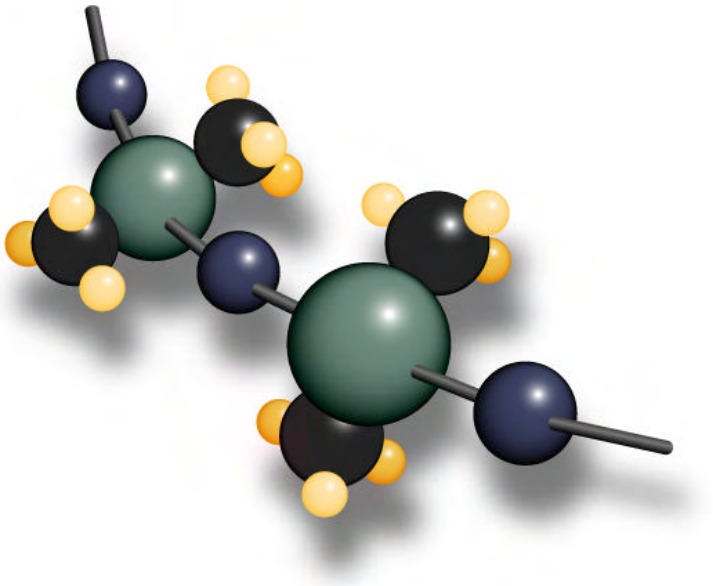

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NuSil Technology
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An ISO 9001 Certified Company

GEL-8150

High Purity Dielectric, Firm Silicone Gel

Product Profile

Description

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

Applications

- For potting, encapsulating, backfilling, and dampening applications requiring a firm gel with optical clarity
- For applications requiring an operating temperature range of -65°C to 200°C (-85°F to 392°F)

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance	Translucent	-	D2090	002
Viscosity	500 cP	500 mPas	D1084, D2196	001
Work Time	4 hours	-	-	008
Specific Gravity	0.97	-	D891	022
Cured: 30 minutes @ 100°C (212°F)				
Penetration*	5 mm	-	DC-CTM 813	017
Dielectric Strength	500 volts/mil	19.7 kV/mm	D149	-
Dielectric Constant @ 100 Hz	2.8	-	D924	-
Volume Resistivity	1 x 10^{15} ohm/cm	-	D257	040
Coefficient of Thermal Expansion	3 x 10^{-4} cm/cm/°C	-	D3386	-

*GCA Precision Penetrometer, 19.5 gram shaft, 1 inch diameter, 5 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.

Packaging

50 ml SxS Kit
200 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

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. Contact NuSil Technology for details

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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 for meeting 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.