

# CV1-8151

Controlled Volatility Silicone Gel

## Product Profile

### Description

- Two-part, controlled volatility, clear silicone gel
- 1:1 Mix Ratio (Part A: Part B)

### Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- As an embedding or potting compound for environmental protection of electronic assemblies and components in electronic or space applications

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
<b>Uncured:</b>				
Appearance	Visually clear to translucent	-	D2090	001
Viscosity, Part A	15,000 cP	15,000 mPas	D-1084, D-2196	001
Viscosity, Part B	9,000 cP	9,000 mPas	D-1084, D-2196	001
Work Time	24 hours	-	-	008
<b>Cured: 30 min @ 150°C (302°F)</b>				
Penetration (GCA Penetrometer, 19.5 g shaft, 6.35 mm diameter)	-	0.3-0.5 mm	DC-CTM 813	017
Volume Resistivity	1 x 10 <sup>14</sup> ohm-cm	-	D-257	040
Collected Volatile Condensable Material (CVCM)	0.05%	-	E 595	072
Total Mass Loss (TML)	0.50%	-	E 595	072
Operating Temperature Range	-85°F to 482°F	-65°C to 250°C	-	-

### Instructions for Use

#### Mixing

Thoroughly mix Part A with Part B in a 1:1 ratio by weight or volume.

#### Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all safety precautions. Slowly apply full vacuum to a container rated for use and at least four times the volume of material being deaerated. Hold vacuum until bulk deaeration is complete.

#### Substrate Considerations

Cures in contact with most materials. Exceptions include butyl and chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

**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.

### Packaging

50 Gram Kit  
 100 Gram Kit  
 200 Gram Kit  
 500 Gram Kit  
 2 Gallon Kit (7.28 kg)

### Warranty

6 Months

## **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**

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## **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.