

**NuSil Technology**

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An ISO 9001 Certified Company

# CV1-2960

Thermally Conductive, Controlled Volatility Silicone

## Product Profile

### Description

- Two-part, white, thermally conductive silicone
- Will cure with the addition of heat
- 10:1 Mix Ratio (Base: Curing Agent)

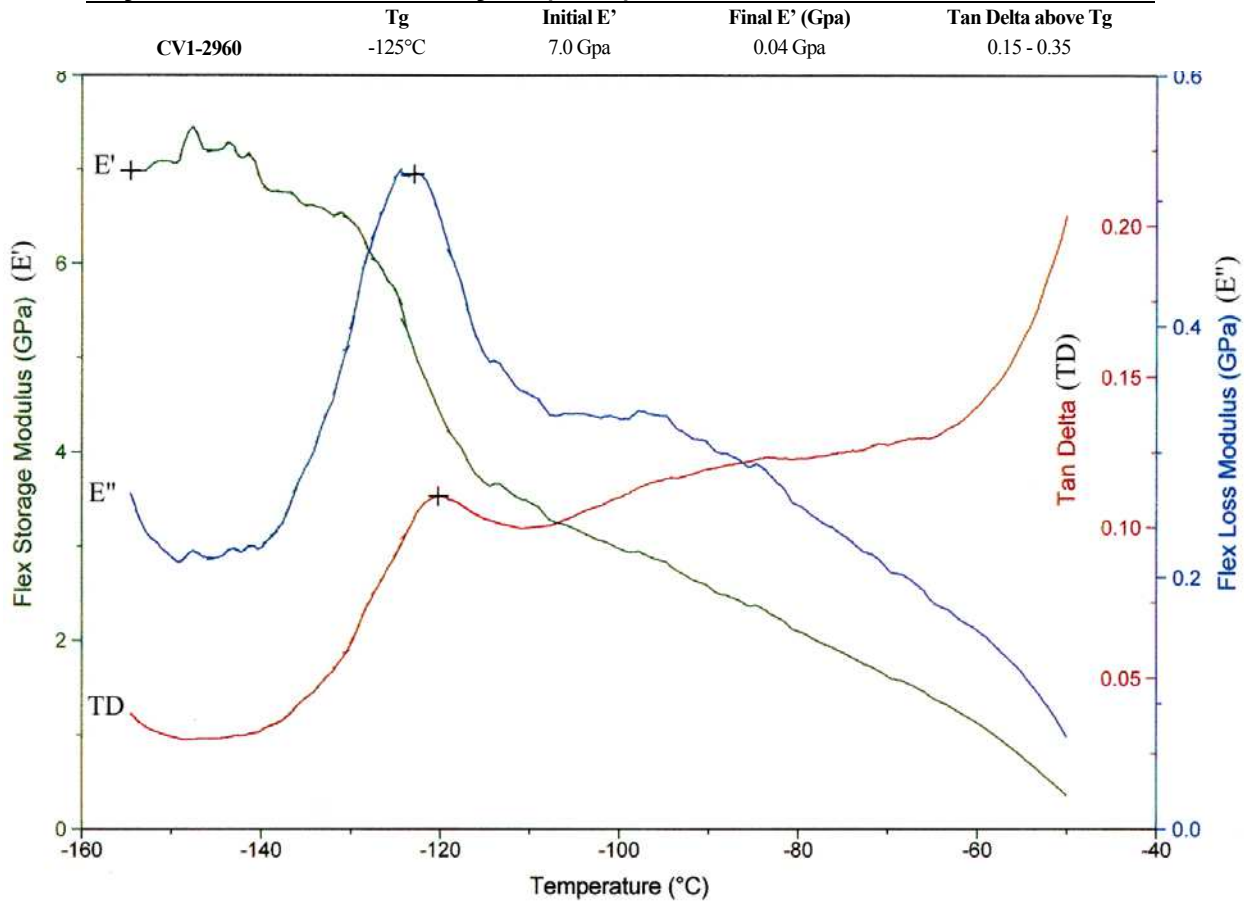
### Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- To provide heat transfer between electrical/electronic components and their heat sinks
- Use to adhere integrated circuit substrates, base plates, heat sinks or where grooves or other configurations require a flowable to limited flow material

### Typical Properties

	Result	Metric Conv.	ASTM	NT-TM
<b>Uncured:</b>				
Color	White	-	-	-
Viscosity	125,000 cP	125,000 mPas	D-1084, D-2196	001
Tack-Free Time	3 hours	-	C-679	005
Work Time	2 hours	-	-	008
<b>Cured: 4 hours @ 65°C</b>				
Specific Gravity @ 25°C (77°F)	1.45	-	D-792	003
Durometer, Type A	75	-	D-2240	006
Tensile Strength	200 psi	1.38 MPa	D-412, D-882	007
Elongation	65%	-	D-412, D-882	007
Tear Strength	45 ppi	7.9 kN/m	D-624	009
Thermal Conductivity	1.04 W/m-k	25 x 10 <sup>(-4)</sup> cal/cm-sec-C	C-177	101
Collected Volatile Condensable Material (CVCM)	0.01%	-	E 595	072
Total Mass Loss (TML)	0.07%	-	E 595	072
Operating Temperature Range	-85°F to 482°F	-65°C to 250°C	-	-

## Dynamic Mechanical Analysis (DMA) ASTM D-4065-01



### Instructions for Use

#### Mixing

Stir base prior to weighing for curing agent addition. Thoroughly mix 10 parts base to 1 part curing agent just prior to use.

#### 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 application may require the use of a primer. NuSil Technology CF1-135 silicone primer is recommended.

#### Adjustable Cure Schedule

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

### 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.

#### Packaging

100 Gram Kit  
250 Gram Kit  
500 Gram Kit

#### Warranty

6 Months

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**

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.