

# CV-2640

Controlled Volatility Electrically Conductive RTV Silicone

## Product Profile



Creative Partners in a Material World

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An ISO 9001 Certified Company

### Description

- Two-part, black electrically conductive RTV silicone
- 10:1 Mix Ratio (Part A:B)
- Based on a diphenyl dimethyl silicone copolymer with a broad temperature range

### Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- Use for RFI and EMI shielding in electronic and space applications
- Use to adhere covers onto housings or for any application where grooves and other configurations require a flowable to limited flow material

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
<b>Uncured:</b>				
Appearance	Black	-	-	-
Work Time	2 hours	-	-	008
<b>Cured: 30 min @ 150°C (302°F)</b>				
Appearance	Black, elastomer	-	D2090	002
Specific Gravity	1.19	-	D792	003
Durometer, Type A	70	-	D2240	006
Tensile Strength	325 psi	2.2 MPa	D412, D882	007
Elongation	75%	-	D412, D882	007
Lap Shear Strength (primed w/ CF1-135)	250 psi	1.7 MPa	D1002	010
Volume Resistivity	1.67 ohm-cm	-	D257	040
Coefficient of Linear Thermal Expansion				
Below Tg (-150° to -115°C)	45 ppm/°C	45 µm/m/°C	-	-
Above Tg (-95°C to 250°C)	580 ppm/°C	580 µm/m/°C	-	-
Collected Volatile Condensable Material (CVCM)	0.01%	-	E 595	072
Total Mass Loss (TML)	0.05%	-	E 595	072
Operating Temperature Range	-178°F to 500°F	-115°C to 260°C	-	-

### Instructions for Use

#### Mixing

Thoroughly mix Part A and Part B, in a 10:1 mix ratio by weight 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

Generally considered to be non-corrosive to most substrates, the oxime cure system may cause discoloration in the presence of copper or copper alloys.

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

### Packaging

50 Gram Kit  
100 Gram Kit  
500 Gram Kit

### 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.