

# R-2637

ELECTRICALLY CONDUCTIVE RTV SILICONE

## DESCRIPTION

- Two-part, tan, electrically conductive RTV silicone
- Based on a methyl silicone polymer with a broad temperature range
- Designed to cure at room temperature and at elevated temperatures
- 20:1 Mix Ratio (Part A:Part B)

## APPLICATION

- For RF and EMI shielding for electrical and aerospace applications
- Excellent for formed-in-place conductive gaskets and grounding connections
- Use to adhere covers on housings or where grooves or other configurations require a non-flowable to limited flow material

## PROPERTIES

TYPICAL PROPERTIES	RESULT	METRIC CONV.	ASTM	NT-TM
<b>Uncured:</b>				
Appearance, Part A	Tan, small agglomerates		D2090	002
Appearance, Part B	Clear	-	D2090	002
Consistency, Part A & B Mixed	Smooth Paste	-	-	-
Work Time @ 50% R.H.	4 hours	-	-	008
<b>Cured : 30 min @ 150°C (302°F)</b>				
Operating Temperature Range	-85 to 400°F	-65 to 200°C	-	-
Specific Gravity @ 25°C (77°F)	3.60	-	D792	003
Durometer, Type A	60	-	D2240	006
Tensile Strength	210 psi	2.1 MPa	D412, D882	007
Elongation	275 %	-	D412, D882	007

TYPICAL PROPERTIES	RESULT	METRIC CONV.	ASTM	NT-TM
Thermal Conductivity	1.5 W/m-k	$3.6 \times 10^{-3}$ cal/(cm-sec-°C)	C177, C1045	101
Dielectric Strength	5 Volts/mil	0.2 kV/mm	D149	-
Volume Resistivity	-	0.006 ohm-cm	D1169	024

## INSTRUCTIONS FOR USE

### Mixing

Thoroughly stir base prior to catalyst addition to ensure a homogenous mixture. Thoroughly mix 20 parts Part A to 1 part Part B by weight just prior to use.

### Vacuum Deaeration

Remove 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 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 is recommended.

### Adjustable Cure Schedule

Product cures at room temperature and 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  
250 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.

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## 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.

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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.