

# R-2630

HIGH DUROMETER, RFI AND EMI SHIELDING RTV SILICONE

## DESCRIPTION

- Two-part, black, electrically conductive RTV silicone
- Based on a methyl silicone polymer with a broad temperature range
- 10:1 Mix Ratio (Base: Curing Agent)

## APPLICATION

- For RFI and EMI shielding for electrical and space applications
- Provides protection from humidity, radiation, thermal stress and mechanical stress
- Well suited for formed in place conductive gaskets
- Use to adhere covers on housings or where grooves or other configurations require a flowable to limited flow material with a low viscosity
- For applications requiring an operating temperature range of -65°C to 200°C (-85°F to 392°F)

## PROPERTIES

TYPICAL PROPERTIES	AVERAGE RESULT	ASTM	NT-TM
<b>Uncured:</b>			
Appearance	Black	ASTM D2090	002
Work Time	15 hours	-	008
<b>Cured: 30 minutes at 150°C (302°F)</b>			
Specific Gravity	1.10	ASTM D792	003
Durometer, Type A	60	ASTM D2240	006
Tensile Strength	690 psi (4.7 MPa)	ASTM D412	007
Elongation	95%	ASTM D412	007



TYPICAL PROPERTIES	AVERAGE RESULT	ASTM	NT-TM
Tear Strength	40 ppi (7.0 kN/m)	ASTM D624	009
Volume Resistivity	6 ohm-cm	ASTM D257, D4496	040

Properties tested on a lot-to-lot basis. Do not use the properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations in establishing particular specifications.

## INSTRUCTIONS FOR USE

### Mixing

Combine Part A and Part B in a 10:1 mix ratio prior to use. Airless mixing, metering or dispensing equipment is recommended for production operations. If mixing by hand, take care to minimize air entrapment.

### Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply full vacuum to a suitable container of at least four times the volume of material being de-aired. Hold vacuum until bulk deaeration is complete.

### Substrate Considerations

Cures in contact with most materials common to biomedical assemblies, exceptions include: sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

### Vulcanization

Curing of the blended elastomer is accelerated by heat. The pre-measured catalyst provides a fixed cure rate. Do not attempt to change molding times by mixing the two components in any other than a 10:1 ratio, as this will affect the properties of the elastomer. Only temperature adjustments should be employed to alter the rate of cure.

Note: Some bonding applications may require the use of a primer. NuSil Technology's CF1-135 is suggested. For more information on primer selection, visit [www.nusil.com](http://www.nusil.com) and review [Choosing a Silicone Primer/Adhesive System](#).

### Packaging

50 Gram Kit  
1 Pint Kit (505 g)  
1 Gallon Kit (4.04 kg)

### Warranty

6 Months

## OPERATING TEMPERATURE

The operating temperature range of a silicone in any application is dependent on many variables, including but not limited to: temperature, time of exposure, type of atmosphere, exposure of the material's surface to the atmosphere, and mechanical stress. In addition, a material's physical properties will vary at both the high and low end of the operating temperature range. This type of silicone typically remains flexible at extremely low temperatures and has been known to perform at -100°C (-148°F) as well as resist breakdown at elevated temperatures up to 300°C (572°F). The user is responsible to verify performance of a material in a specific application.



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## RoHS AND REACH COMPLIANCE

R-2630 is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) regulation contained in Article 4(1) of the European Parliament and Council's Directive 2002/95/EC. RoHS mandates that manufacturers restrict the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polychlorinated biphenyls, and polybrominated diphenyl ethers in electrical and electronic equipment.

R-2630 is also compliant with the Registration, Evaluation, and Authorization of Chemicals (REACH) regulation (European Union 1907/2006). R-2630 does not contain any of the chemicals or substances identified as Substances of Very High Concern (SVHC) by the European Chemicals Agency (ECHA), which oversees REACH compliance.

Please contact NuSil Technology's Regulatory Compliance department with any questions or for further assistance.

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## SPECIFICATIONS

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## WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC (hereinafter "NuSil Technology") 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 all other expressed or implied warranties, including, but not limited to, 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.

### Warnings About Product Safety

NuSil Technology believes, to the best of its knowledge, that the information and data contained herein are accurate and reliable. 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 Sheet 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, the user is advised to obtain available product safety information and take the necessary steps to ensure safety of use.

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