

# R-2160

## Black silicone coating / marking ink

### DESCRIPTION

- Two-part, red, pourable silicone system
- 10:1 Mix Ratio (Part A:B)
- Cures at room temperature or rapidly with heat
- High tear strength and good physical properties

### APPLICATION

- As a high temperature adhesive / sealant
- Ideal for use in potting connectors, cable harness breakouts, molded high voltage terminals, seals and gaskets due to its high physical strength
- For applications requiring an operating temperature range of -65°C to 315°C (-85°F to 600°F)

### PROPERTIES

Typical Properties	Average Result		Metric Conv.		Standard	NT-TM
	Part A	Part B	Part A	Part B		
<b>Uncured:</b>						
Appearance	Red	Translucent	-	-	ASTM D2090	002
Consistency	Pours Easily	Pours Easily	-	-	-	-
Viscosity	250,000 cP	650 cP	250,000 mPas	650 mPas	ASTM D1084, D2196	001
Non-Volatile Content	100%		-		ASTM D792	004
Work Time	50 minutes		-		-	008
<b>Cured: 30 minutes at 150°C (302°F)</b>						
Specific Gravity	1.20		-		ASTM D792	003
Durometer, Type A	20		-		ASTM D2240	006
Tensile Strength	750 psi		5.2 Mpa		ASTM D412	007
Elongation	625%		-		ASTM D412	007
Tear Strength	150 ppi		26.5 kN/m		ASTM D624	009
Dielectric Strength	500 volts/mil		19.7 kV/mm		ASTM D149	-
Volume Resistivity	1 x 10 <sup>14</sup>		-		ASTM D257	040

## INSTRUCTIONS FOR USE

### Mixing

Mix in a 10:1 ratio Part A to Part B. Take care to minimize air entrapment during mixing.

### 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.

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.

## SPECIFICATIONS

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.

## WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC (hereinafter "NuSil Technology") is 12 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.

### Packaging

1 Pint Kit (505 g)  
1 Gallon Kit (4.04 kg)  
5 Gallon Kit (20.2 kg)

### Warranty

12 Months

## 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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