

R-2940

High strength, thermally conductive silicone

DESCRIPTION

- Two-part, gray, thermally conductive silicone with high strength
- Cure may be heat accelerated
- 20:1 Mix Ratio (Part A: Part B)

APPLICATION

- 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 non-flowable to limited flow material

PROPERTIES

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
Uncured:				
Chemical Classification	VMQ	-	-	-
Color	Gray	-	-	-
Consistency	Paste	-	-	-
Work Time at 25°C (77°F)	5 hours	-	-	008
Tack-Free Time at 25°C (77°F)	24 hours	-	ASTM C679	005
Cured: 30 min at 150°C (302°F)				
Operating Temperature Range	-85 to 465°F	-65 to 240°C	-	-
Specific Gravity at 25°C (77°F)	2.41	-	ASTM D792	003
Durometer, Type A	90	-	ASTM D2240	006
Tensile Strength	700 psi	4.8 Mpa	ASTM D412, D882	007
Elongation	35 %	-	ASTM D412, D882	007
Tear Strength, Die B	65 pli	11.5 kN/m	ASTM D624	009
Thermal Conductivity	0.84 W/mk	20 x 10 ⁻⁴ cal/cm-sec-°C	ASTM C177	101
Dielectric Strength	450 volt/mil	17.7 kV/mm	ASTM D149	-

INSTRUCTIONS FOR USE

Mixing

Stir Part A well prior to weighing for mixing to ensure the filler is homogeneous throughout. Thoroughly mix in a ratio of 20:1 Part A to Part B.

Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply vacuum 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

R-2930 will cure 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 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.

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 (1 kg)
1 Gallon Kit (8 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.

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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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