NuSil SILICONE TECHNOLOGY
Creative Partners in a Material World

NuSil Technology
1050 Cindy Lane • Carpinteria, CA 93013
805/684-8780 • 805/566-9905 Fax
www.nusil.com

An ISO 9001 Certified Company

CV10-2568

Controlled Volatility RTV Ablative Silicone

Product Profile

Description

- Two-part, red, low specific gravity, RTV silicone
- Based on a diphenyl dimethyl silicone copolymer with a broad temperature range
- 1:1 Mix Ratio (Part A: Part B)

Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- Use a bonding, sealing, or potting material in electronic and space applications
- Provides radiation resistance, low thermal conductivity, oxidation stability, thermal stability and good ablative characteristics
- Especially useful to bond solar cells to solar array panels

Typical Properties	Result		Metric Conv.		ASTM	NT-TM
Uncured:	**Part A**	**Part B**	**Part A**	**Part B**		
Appearance	Red	White	-	-	D2090	002
Viscosity, Base	125,000 cP	80,000 cP	125,000 mPas	80,000 mPas	D1084, D2196	001
Cure System	Platinum Addition		-		-	-
Work Time	3 hours		-		-	008
Cured: 30 min @ 150°C (302°F)						
Specific Gravity	0.76		-		D792	003
Durometer, Type A	40		-		D2240	006
Tensile Strength	235 cP		1.6 MPa		D412, D882	007
Elongation	170%		-		D412, D882	007
Lap Shear Strength (primed w/ CF1-135)	175 psi		1.2 MPa		D1002	010
Coefficient of Linear Expansion						
Below Tg (-150° to –115°C)	55 ppm/°C		55 ∝m/m/°C		-	-
Above Tg (-95°C to 250°C)	245 ppm/°C		245 ∝m/m/°C		-	-
Dielectric Strength	860 Volts/mil		33.9 kV/mm		-	-
Collected Volatile Condensable Material (CVCM)	0.03%		-		E 595	072
Total Mass Loss (TML)	0.30%		-		E 595	072
Operating Temperature Range	-178°F to 465°F		-115°C to 240°C		-	-

Instructions for Use

Mixing
Thoroughly stir both parts individually prior to mixing, as some separation may occur. Mix Parts A and B in a 1:1 ratio by weight.

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 Consideration
Cures in contact with most materials common to electronic assemblies. Exceptions include butyl and chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents. Units being encapsulated, containers and dispensers should be dry, clean, and free of surface contaminants. Cure inhibition can usually be prevented by washing all containers with solvent or volatizing contaminants by heating.

Note: Some bonding application may require the use of a primer. NuSil Technology CF1-135 silicone primer is recommended.

Packaging

50 Gram Kit
100 Gram Kit
250 Gram Kit
500 Gram Kit

Warranty

6 Months

Adjustable Cure Schedule
Product cures at a wide range of cure times and temperatures to accommodate different production needs. Contact NuSil Technology for details.

Warnings About Product Safety

NuSil Technology believes the information and the 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

NuSil Technology disclaims any expressed or implied warranty against the infringement of any patent. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any United States' or other country's patents covering the product itself, its use in combination with other products or its use in the operation of any process.

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.