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UK & Ireland Distributor

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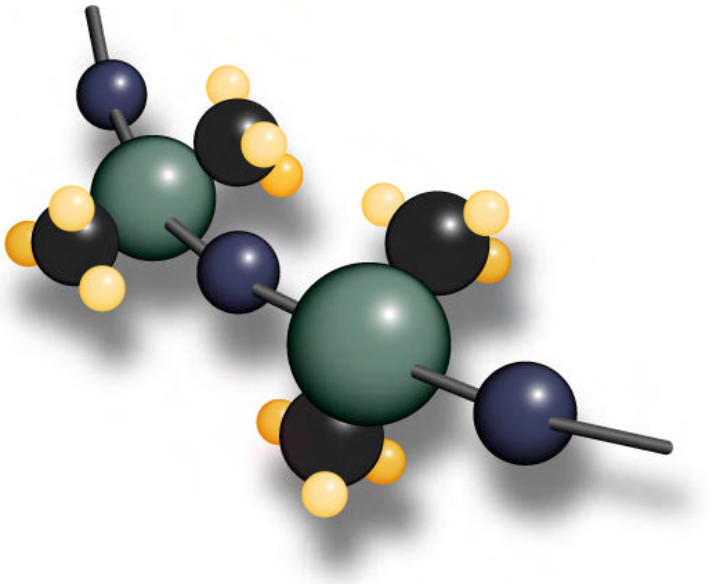

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Product Profile

NuSil SILICONE TECHNOLOGY
Creative Partners in a Material World

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An ISO 9001 and AS9100 Certified Company

CV-2568

Controlled Volatility RTV Silicone

Description

- A low density, two-part, red, thixotropic RTV silicone
- 100: 0.5 Mix Ratio (Base: Curing Agent)

Meets or exceeds the ASTM E 595 low outgas specifications outlined in NASA SP-R-0022A and European Space Agency PSS-014-702, with a TML of ≤1% and CVCM of ≤0.1%

Applications

- For applications requiring low outgassing and minimal volatile condensables under extreme operating conditions to avoid condensation in sensitive devices
- As 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
- For applications requiring a broader operating temperature range

Properties	Average Result	ASTM	NT-TM
Uncured:			
Appearance*	Red	D2090	002
Viscosity, Base*	125,000 cP (125,000 mPas)	D1084, D2196	001
Work Time*	4 hours	-	008
Cured: 7 days minimum @ ambient temp and humidity			
Specific Gravity*	0.64	D792	003
Durometer, Type A*	50	D2240	006
Tensile Strength*	175 psi (1.2 MPa)	D412	007
Elongation*	60%	D412	007
Lap Shear Strength* (primed w/ SP-120)	100 psi (0.69 MPa)	D1002	010
Dielectric Strength	645 volts/mil (25.4 kV/mm)	D149	-
Coefficient of Linear Thermal Expansion			
Below Tg (-150°C to -115°C)	70 ppm/°C (70 µm/m/°C)	D3386	-
Above Tg (-95°C to 250°C)	180 ppm/°C (180 µm/m/°C)	D3386	-
Dynamic Mechanical Analysis (DMA)	See Attached Graph	D4065	-
Collected Volatile Condensable Material (CVCM)*	0.04%	E 595	072
Total Mass Loss (TML)*	0.33%	E 595	072

*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
Stir base prior to curing agent addition. Thoroughly mix 0.5% by weight of curing agent to base by weight. Use of a pipette is recommended for dispensing small amounts of the curing agent.

Caution: The curing agent may cause skin irritation. In case of eye contact, irrigate with water immediately and seek medical attention.

Packaging

50 Gram Kit
100 Gram Kit
250 Gram Kit

Warranty

6 Months

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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 the material being deaerated. Hold vacuum until bulk dearation is complete.
Note: Some bonding applications may require the use of a primer. NuSil Technology SP-120 silicone primer is recommended.

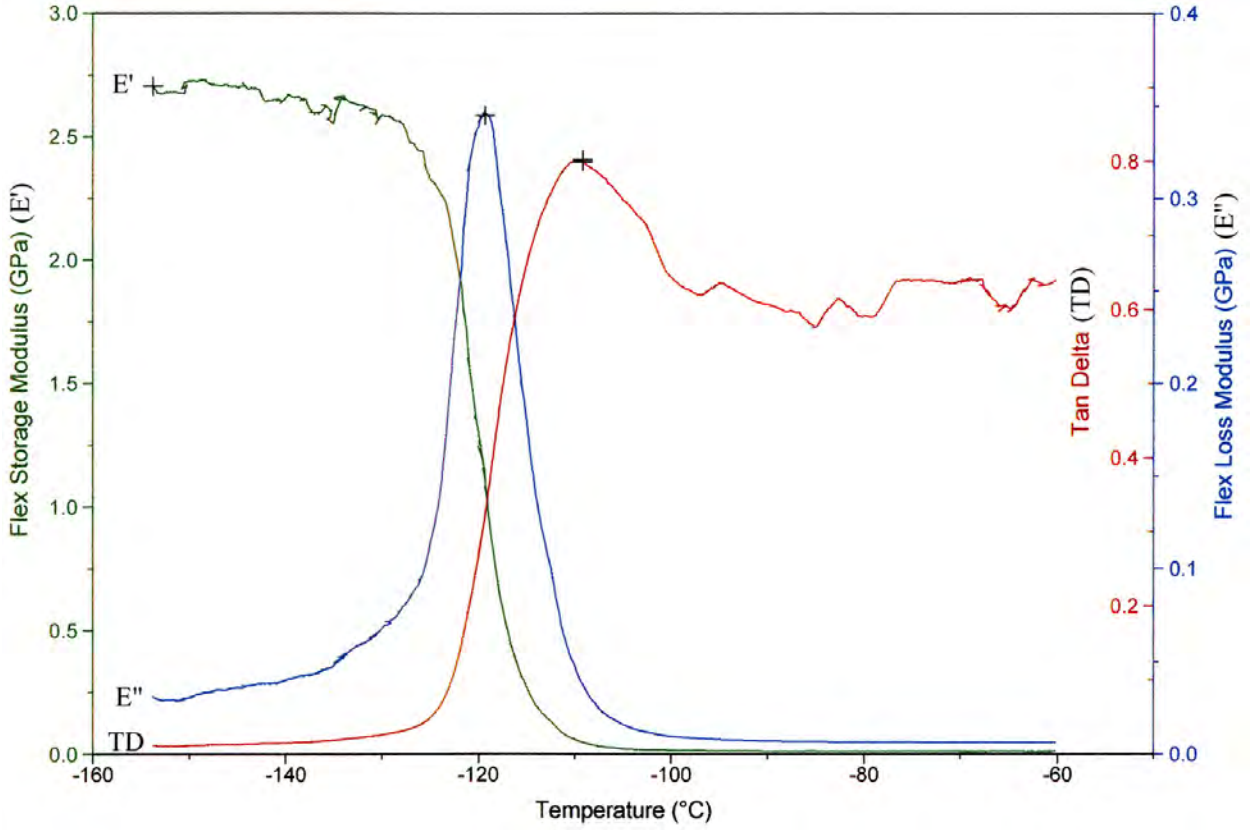
Adjustable Cure Schedule
Product cures at a wide range of temperatures and cure times to accommodate different production needs. Contact NuSil Technology for details. Some cure schedules* include:

65°C (149°F)	100°C (212°F)
>48 hours	2 hours

* Cure time defined as the time required for a knife coat layer ~0.02" to be removed from a release liner

Dynamic Mechanical Analysis (DMA) ASTM D4065

	Tg	Initial E'	Final E' (Gpa)	Tan Delta above Tg
CV-2568	-120°C	2.5 Gpa	0.007 Gpa	0.6 - 0.8



Heat and Low-Temperature Resistance

In most applications, silicone may be heated from 180 to 200°C for a year, or even up to 450°C for short periods, without any appreciable effect on physical properties. Silicone also demonstrates flexibility at extreme low temperatures, with a stiffening temperature of approximately -115°C.

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. The user is responsible to verify performance of a material in a specific application.

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RoHS and REACh Compliance

CV-2568 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.

CV-2568 is also compliant with the Registration, Evaluation, and Authorization of Chemicals (REACh) regulation (European Union 1907/2006). CV-2568 does not contain any of the 16 chemicals 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.

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 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.

Patent / Intellectual Property Warning

NuSil Technology disclaims any expressed or implied warranty against the infringement of any domestic or international patent/intellectual property right. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any domestic or international patent/intellectual property right covering the product itself, its use in combination with other products, or its use in the operation of any process.

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