

CV9-1142

Non-Corrosive Controlled Volatility RTV Silicone Adhesive/Sealant

Product Profile

Description

- One-Part, translucent, non-slumping silicone RTV
- Based on a dimethyl diphenyl silicone polymer with a broad temperature range

Applications

- For applications requiring extreme low temperature, low outgassing and minimal volatile condensables under extreme operating conditions
- As a sealing, caulking, adhesive or potting material in electrical and space applications to provide corrosion protection of sensitive circuits including in connectors, switches and electrical components
- For sealing openings in modules or housings where grooves or other configurations require a one-part, non-flowable to limited flow material with a high extrusion rate

Typical Properties

	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance	Translucent	-	-	-
Consistency	Non-Slump	-	-	-
Extrusion Rate*	35 gpm	-	C603	033
Cure Time, 50% R.H. @ 25°C				
Tack Free	20 min	-	C679	005
Cure System	Oxime	-	-	-
Full Cure*	7 days	-	-	075
Cured: 7 days @ ambient temp. and humidity				
Appearance	Translucent, Elastomer	-	D2090	002
Specific Gravity	0.80	-	D792	003
Durometer, Type A	55	-	D412, D882	007
Tensile Strength	325 psi	2.2 MPa	D412, D882	007
Elongation	100%	-	D412, D882	007
Dielectric Strength	500 volts/mil	19.7 kV/mm	D149	-
Volume Resistivity	1x10 ¹⁵	-	D257	040
Collected Volatile Condensable Material (CVCMM)	0.03%	-	E 595	072
Total Mass Loss (TML)	0.38%	-	E 595	072
Operating Temperature Range	-178°F to 500°F	-115°C to 260°C	-	-

* Performed using a SEMCO® 440 nozzle with an 1/8" orifice and 60 +/-5 psi air pressure
 ** Thick sections may require extended cure times. Allocate adequate time for complete cure

Instructions for Use

Apply CV9-1142, supplied in cartridges, with the use of an appropriate caulking gun.

Substrate Considerations

Although generally considered to be non-corrosive to most substrates, the oxime cure system may cause discoloration in the presence of copper or copper alloys.

Warnings About Product Safety

NuSil Technology believes that the information and 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

Packaging

3 oz Tube (89 mL)
 6 oz Tube (177 mL)

Warranty

6 Months

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.

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