

R3-1075

RTV silicone conformal coating

DESCRIPTION

- A one-part, RTV silicone dispersion with a non-corrosive cure
- Supplied pre-dispersed at 60% solids in xylene
- Available with the addition of UV tracer to facilitate easier QC inspection

APPLICATION

- As a conformal coating for electrical and electronic components including rigid and flexible printed circuit boards
- As a protective coating to prevent corrosion and erosion of various parts and surfaces in missiles, rockets, aircraft and launch equipment

PROPERTIES

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
Uncured:				
Chemical Classification	MQ	-	-	-
Color	Translucent	-	-	-
Viscosity at 25°C (77°F)	3,300 cP	3,300 mPas	ASTM D1084, ASTM D2196	001
Non-Volatile Content	60%	-	ASTM D2288-69	004
Cure Time: 50% R.H at 25°C (77°F)				
Tack-Free Time	80 minutes	-	ASTM C679-87	005
Full Cure	7 days	-	-	075
Cure System	Oxime	-	-	-
Solvent Type	Xylene	-	-	-
Cured: 7 days at 25°C, 50% R.H.				
Appearance	Translucent	-	ASTM D2090	002
Specific Gravity at 25°C (77°F)	1.06	-	ASTM D792	003
Durometer, Type A	40	-	ASTM D2240	006
Tensile Strength	700 psi	4.8 Mpa	ASTM D412, D882	007

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
Elongation	350 %	-	ASTM D412, D882	007
Tear Strength, Die B	40 ppi	7.1 kN/m	ASTM D624	009
Dielectric Strength	1250 Volts/mil	49.2 kV/mm	ASTM D149	-
Operating Temperature Range	-85 to 465°F	-65°C to 240°C	-	-

INSTRUCTIONS FOR USE

Thoroughly stir prior to use, as the product separates. Apply R3-1075 by spraying, dipping or brushing. For spray applications, thin with a compatible moisture-free solvent to the appropriate viscosity for the spray equipment being used. Solvent addition is best achieved by mixing in a closed container, preferably with a commercial paint shaker. Apply successive coats within 30 minutes of the preceding coats.

Substrate Consideration

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

Note: Some bonding applications may require the use of a primer. NuSil Technology SP-120 is recommended.

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

Packaging	Warranty
1 Pint (400 g)	6 Months
1 Gallon (3.2 kg)	
5 Gallon (16 kg)	

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

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