R-1182

Low coefficient of friction silicone coating

DESCRIPTION

- One-part acetoxy cured silicone elastomer dispersed in Tert-Butyl Acetate
- Cures to a smooth silicone film that decreases the coefficient of friction (CoF) compared to the uncoated silicone and increases abrasion resistance for moving, sliding, and rubbing parts
- A non-blocking topcoat for silicone surfaces that is easy to clean and prevents the accumulation of Foreign Object Debris (FOD)

APPLICATION

- Provides a RTV, low-friction coating on cured silicone substrates
- For best results apply by spraying (dipping may also be utilized)

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	Translucent	ASTM D2090	002
Zahn Cup Viscosity, Cup #2*	20 seconds	ASTM D1084	096
Percent Solids, Silicone Primers	7.0%	ASTM D2369	047

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 and testing parameters.

INSTRUCTIONS FOR USE

Coating and Application

Although the R-1182 may be applied by means of dipping or brushing, optimal results are obtained through spraying techniques.

The following instructions apply to airbrush as well as retouch/refinish type spray equipment on parts up to 8" diameter. Suggested spray equipment includes Badger Airbrush 400, DeVILBISS JGHV-520, or DeVILBISS EGA-503. Parameters may differ based on spray equipment used as well as the size and geometry of the part to be coated.

1. Clean the surface to be coated thoroughly with an appropriate solvent and lint-free cloth or foam wipe. Allow the solvent to evaporate completely.
2. Thoroughly stir or shake the material to ensure homogeneity.
3. Due to low viscosity of R-1182, material may be allowed to self-deaerate.
4. Set air pressure to approximately 90 psi coming from the wall and 10 psi in the gun reservoir. Adjust nozzle opening to the point where the material begins to get atomized.
5. Hold the nozzle 2 – 4 inches from the substrate and apply the coating in a slow and steady up/down or side/side motion. The substrate should be evenly wetted with a fine layer, but not soaked to a point where the coating is pooling or dripping. A final sweeping pass at a distance of 4 – 6 inches may give the coating a more uniform appearance.
6. Allow the bulk of the solvent to evaporate in an area with good airflow and ventilation, such as under a fume hood. This should be accomplished in about 3 – 10 minutes depending on the ambient temperature and airflow.
7. Cure the coating at ambient conditions as suggested on the Standard Material Certification.

Note: Avoid using isopropanol to clean the coated surface as the coating can be removed by this solvent.

Substrate Considerations

The substrate being coated with the dispersion should be able to withstand the cure cycle, be free of contamination, and should not inhibit the cure.

R-1182 is optimized for use with OH end-blocked tin catalyst systems. This product may not cure or may take longer to cure when adhering to vinyl end-blocked systems.

Packaging	Warranty
50 Gram 1 Pint (0.39 kg) 1 Quart (0.750 kg) 1 Gallon (3.12 kg)	12 Months

ROHS AND 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 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.

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

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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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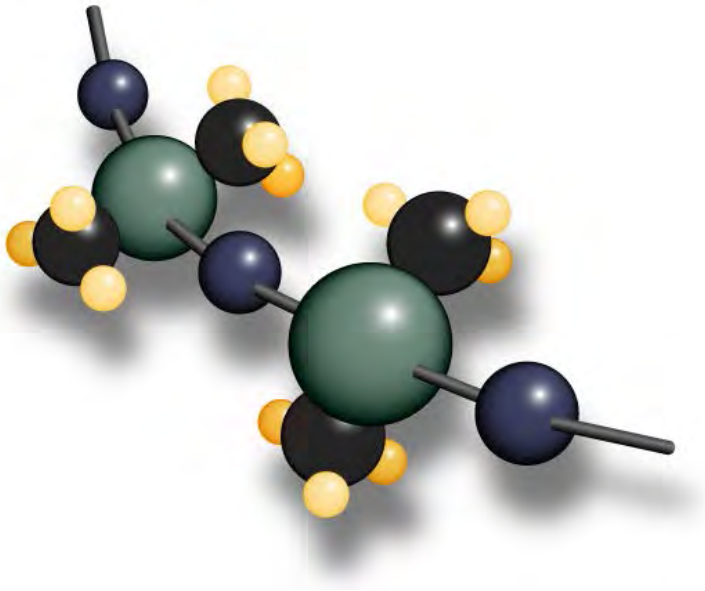

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