

# FS1-3730

# Fluorosilicone adhesive/sealant

# **DESCRIPTION**

- A translucent, one-part, RTV silicone
- Based on a 100 mole % fluorosilicone polymer

# **APPLICATION**

- For sealing and bonding applications requiring solvent and/or fuel resistance
- Bonds aggressively to most surfaces

# **PROPERTIES**

Typical Properties	Average Result	Metric Conv.	Standard	NT-TM
Uncured:		•		
Appearance	Translucent	-	ASTM D2090	002
Consistency	Thixotropic	-	-	-
Non-Volatile Content	100	-	ASTM D2288-69	004
Extrusion Rate*	150 gpm	-	ASTM C603	033
Tack-Free Time at 25°C (77°F), 50% R.H.	30 min	-	ASTM C679-87	005
Cure Time: at 25°C (77°F), 50% R.H.				
Set Up (thin sections)	24 hours			
Full Cure	7 days	-	-	075
Cure Time: at 25°C (77°F), 50% R.H.				
Operating Temperature Range	-85 to 465°F	−65 to 240°C	-	-
Specific Gravity	1.40	-	ASTM D792	003
Durometer, Type A	35	-	ASTM D2240	006
Tensile Strength	850 psi	5.9 Mpa	ASTM D412, D882	007
Elongation	425 %	-	ASTM D412, D882	007
Tear Strength	60 ppi	-10.6 N/mm	ASTM D624	009
Lap Shear Strength, primed aluminum	275 psi	1.9 Mpa	ASTM D1002	010

<sup>\*</sup> Performed using a SEMCO® 440 nozzle with a 1/8" orifice and 90+/-5 psi air pressure



### INSTRUCTIONS FOR USE

Cure Time

Cure time depends upon humidity and the thickness of the material being bonded. Accomplish cure by exposing to atmospheric moisture and may take longer in dry air. Cure occurs at any level above 20% relative humidity. Cure continues for several days until acetic acid odor has disappeared. Vulcanization and cure are not significantly improved by heating.

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

#### **OPERATING TEMPERATURE**

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. This type of silicone typically remains flexible at extremely low temperatures and has been known to perform at -65°C (-85°F) as well as resist breakdown at elevated temperatures up to 250°C (482°F). The user is responsible to verify performance of a material in a specific application.

#### **SPECIFICATIONS**

Do not use the properties shown in this technical profile as a basis for preparing specifications. Please <u>contact</u> 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.

Packaging

Warranty

6 Ounce Tube (177 mL)

12 Months

#### 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 <u>contact</u> 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 <u>contact</u> 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.

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