

# FS-3511

## Liquid injection molding fluorosilicone elastomer

### DESCRIPTION

- Two-part, translucent, fluorosilicone elastomer used with liquid injection molding equipment
- 1:1 Mix Ratio (Part A: Part B)
- Cures rapidly with heat
- 100 mole % fluorosilicone

### APPLICATION

- For components exposed to JP-8, aviation fuels and solvents
- For applications requiring a medium hardness silicone with solvent resistance
- Some typical applications include O-rings, gaskets, seals, and precision molded parts
- Excellent for molding high quality parts at rapid rates

### PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
<b>Uncured:</b>			
Appearance	Translucent	ASTM D2090	002
Extrusion Rate, Part A (Performed using a SEMCO® 440 nozzle with a 1/8" orifice and 90+/-5 psi air pressure)	40 g/min	ASTM C603	033
Extrusion Rate, Part B (Performed using a SEMCO® 440 nozzle with a 1/8" orifice and 90+/-5 psi air pressure)	35 g/min	ASTM C603	033
Work Time	> 24 hours	-	008
<b>Cured: 30 min at 150°C (302°F) Stabilize for 3 hrs at ambient temperature and humidity</b>			
Specific Gravity	1.39	ASTM D792	003
Durometer, Type A	40	ASTM D2240	006
Tensile Strength	1,150 psi (7.9 MPa)	ASTM D412	007
Elongation	335%	ASTM D412	007
Tear Strength	60 ppi (10.6 kN/m)	ASTM D624	009

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

Use with mix and dispense equipment in a 1:1 mix ratio. If mixing by hand, take care to minimize air entrapment.

### Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable safety precautions. Slowly apply vacuum, up to 28 inches Hg, to a container rated for use and of volume at least four times that of material being deaerated. Hold vacuum until presence of air is no longer evident.

### Substrate Considerations

Cures in contact with most materials, exceptions include: sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

Note: Some bonding applications may require the use of a primer. NuSil Technology's CF1-135 is recommended.

### Adjustable Cure Schedule

Product cures at a wide range of cure times and temperatures to accommodate different production needs. [Contact](#) NuSil Technology for details.

## 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.

## ROHS AND REACH COMPLIANCE

Please [contact](#) NuSil Technology's Regulatory Compliance department with any questions or for further assistance

### Packaging

50 mL SxS Kit  
 200 mL SxS Kit  
 400 mL SxS Kit  
 2 Pint Kit (910 g)  
 2 Gallon Kit (7.28 kg)  
 10 Gallon Kit (36.4 kg)  
 2 Drum Kit (360.0 kg)

### Warranty

12 Months

## 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 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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# **Polymer Systems** Technology Limited

## Silicone Sales & Services UK - Ireland - Benelux

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Unit 2. Network 4. Cressex Business Park,  
Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: <https://www.silicone-polymers.com>

email: [sales@silicone-polymers.co.uk](mailto:sales@silicone-polymers.co.uk)

