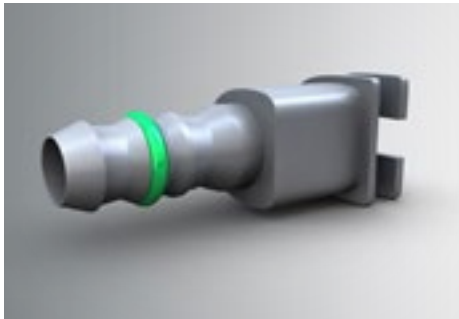




Consumer Solutions

# SILASTIC™ Fluorosilicone Rubber (FSR)

High-performance engineered elastomers with fuel, oil and chemical resistance



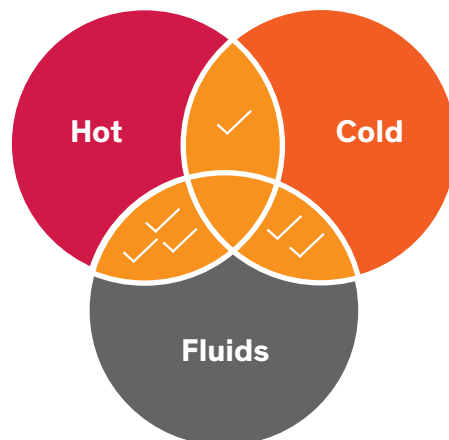
### FSR Performance and Processing

SILASTIC™ fluorosilicone rubber combines excellent mechanical properties with proven environmental resistance that many organic elastomers cannot match.

Key strengths are:

- High resistance to fuels, oils, solvents and harsh chemicals
- Durable stability in extreme temperatures, from -50°C to +200°C
- Reliable performance with heat aging and fluid immersion
- Wide range of engineering properties for application versatility

### Fluorosilicone Performance Matrix



With good processing characteristics for both precision and efficiency, SILASTIC™ fluorosilicone rubber is suitable for molding, extruding and calendering.

### FSR Options and Applications

SILASTIC™ fluorosilicone rubber can help meet your performance and processing requirements for more durable and reliable automotive components with a range of product options. These include FSR engineered elastomers for general purpose uses, as well as for uses that demand high strength or high fatigue life.

Potential applications include:

- Engine seals and gaskets
- Fuel system connector seals
- Flexible diaphragms and valves
- Turbocharger hose liners

## Selection Guide with Typical Properties

Property	Test Method*	Unit	General Purpose			High Strength		High Fatigue Life
			SILASTIC™ DY 37-016 U Rubber	SILASTIC™ LS 63 U Rubber	SILASTIC™ DY 37-071 U Rubber	SILASTIC™ SE 1561 U Fluorosilicone Rubber	SILASTIC™ SE 1570 U Fluorosilicone Rubber	SILASTIC™ DY 37-029 U Rubber
<b>As supplied</b>								
Appearance	CTM 0176		Straw yellow	White	Straw yellow	Straw yellow	Straw yellow	Brown
RC-4 (50P) phr to 100 phr of U stock			1	1	1	1	1	1
Molding condition by press		min/°C	10/170	10/170	10/170	10/170	10/170	10/170
Post-cure condition		hr/°C	4/200	8/200	4/200	4/200	4/200	4/200
<b>As cured</b>								
Density	JIS K 6249	g/cm <sup>3</sup>	1.42	1.48	1.45	1.45	1.48	1.42
Hardness, JIS type A	JIS K 6249		53	60	70	60	70	47
Tensile strength, JIS#3	JIS K 6249	MPa	8.6	7.8	9.2	8.8	8.1	10.5
Elongation, JIS#3	JIS K 6249	%	330	330	220	400	310	410
Tear strength, crescent	JIS K 6249	N/mm	11	28	11	22	22	16
Compression set, 70 hr/150°C	JIS K 6249	%	5	18	6	7	14	7
<b>Heat stability – 70 hr/200°C</b>								
Change in hardness	JIS K 6249	points	1	7	-1	1	5	0
Percentage change in tensile strength	JIS K 6249	%	-17	-20	-18	-19	-17	-14
Percentage change in elongation	JIS K 6249	%	-1	-34	-12	-6	-20	-4
<b>Fluid resistance – IRM 903, 70 hr/150°C</b>								
Change in hardness	JIS K 6249	points	-6	-1	-4	-7	-2	-3
Percentage change in tensile strength	JIS K 6249	%	-13	7	-11	-11	-11	-12
Percentage change in elongation	JIS K 6249	%	-7	-8	-13	-1	-19	-2
Volume swell	JIS K 6249	%	3	3	4	4	3	3
<b>Fluid resistance – FUEL C, 72 hr/23°C</b>								
Volume swell	JIS K 6249	%	23	21	23	24	23	21

\*CTM: Corporate Test Method. Copies of CTMs are available upon request.  
JIS: Japanese Industrial Standard.

**Specification Writers:** These values are not intended for use in preparing specifications. Please contact your Dow Sales Application Engineer or Dow Customer Service before writing specifications on these products.

### For More Information

To learn more about using these fluorosilicone rubber products in challenging automotive applications, contact your Dow technical representative or visit [consumer.dow.com](http://consumer.dow.com).

Images: dow\_40386217493, dow\_40387783136, dow\_40365049392, dow\_40145801331

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