


<b>ORING.SU</b>				
<b>Material Data Sheet</b>	Code	<b>F70A</b>		Issue 3 Revision 2
	Designation	<b>FVMQ</b>		Feb 2017

**MATERIAL TYPE:** Blue Fluorosilicone Rubber, 60 to 70 °IRHD.

Fluorosilicone rubber having methyl, vinyl and fluorine substituent groups on the polymer chain. Meets material properties of Aerospace Specification Mil-DTL-25988C, Class 1, Grade 70.

**APPLICATION:** Excellent heat resistance and low temperature flexibility. Suitable for sealing petroleum oils and hydrocarbon fuels. Fluorosilicones are widely used in aircraft fuel systems.

**TEMPERATURE RANGE:**

Minimum temperature	-55°C (-67°F)
Maximum temperature	+225°C (+437°F)

**STORAGE RECOMMENDATION:** BS3F68 = Group 'X' rubber, no periodic re-inspection required.

<b>TYPICAL PHYSICAL PROPERTIES:</b>			
<b>Property</b>	<b>Unit</b>	<b>Test Method</b>	<b>Typical Value</b>
Hardness (points)	°IRHD	ASTM D 1415 (=ISO 48)	65
Tensile strength	MPa	ASTM D 412 (=ISO 37)	8.0
Elongation at break	%	ASTM D 412 (=ISO 37)	200
<b>Compression Set, Method B:</b>			
22 hours at 175°C (347°F)	%	ASTM D 395 (=ISO 815)	10
<b>Heat Resistance, 70 hours at 200°C. (392°F);</b>			
Hardness change (points)			+5
Tensile strength change (%)			+5
Elongation at break change (%)			-14
<b>Low Temperature Resistance:</b>			
TR10	°C		-57

**HEALTH AND SAFETY DATA:** No known hazard exists if used in accordance with the temperature range as quoted.

**FIRE HAZARD:** Ignition temperature >300°C (572°F).

Thermal decomposition will generate fluorinated gasses, which may include hydrogen fluoride. In the event of a fire, fire fighters must wear self-contained breathing apparatus and a protective suit. Extinguish with water, foam, carbon dioxide or dry chemical. Neutralise any refuse from a fire involving FVMQ with calcium hydroxide solution and wear Neoprene® gloves before handling.

**DISPOSAL:** Must conform to national, state and/or local regulations. Landfill is recommended. Burning is not recommended, unless conducted by an approved/licensed incineration agency.

**SPECIAL NOTE:** This information is to the best of our knowledge accurate to the date indicated. However, PPE make no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life, therefore a regular program of inspection and replacement is strongly recommended.