TFT[™] Fluorosilicone (FVMQ) Teflus[®] FS Series

Teflus [®] FSG Series (Rubber <u>G</u> um)		Teflus [®] FSB Series (Rubber <u>Base</u>)		
Туре	Teflus [®] FSG	Туре	Teflus [®] FSB	
<u>R</u> TV Homopolymer	FSG-R100	High <u>T</u> ear Strength	FSB-T100	
<u>H</u> TV Homopolymer	FSG-H100	Extrusion	FSB-E100	
<u>R</u> TV Copolymer	FSG-R200	<u>G</u> eneral Purpose	FSB-G100	
<u>H</u> TV Copolymer	FSG-H200	Low <u>C</u> ompression	FSB-C200	
Ex) Teflus [®] FSG series (FSG-R110, FSG-H230,)		Ex) Teflus [®] FSB series (FSB-T130, FSB-C281,)		

100	
Teflus [®] FSL S	eries (Oi <u>l</u>)
Туре	Teflus [®] FSL
Hydroxyl	FSL-100
Methyl	FSL-200
Homopolymer Vinyl	FSL-300
Compolymer Vinyl	FSL-400

Ex) Teflus[®] FSL series (FSL-110, FSL-420, ...)

Fluorosilicone Rubber (FVMQ)

Fluorosilicone rubber (FVMQ) is an elastomer obtained by homopolymerization of tris(trifluoropropyl) trimethylcyclotrisiloxane (abbreviated as D3F) or copolymerization with other silicone monomers. The backbone of fluorosilicone rubber is the same as the common silicone rubber (VMQ) while the side chain of flurosilicone rubber introduces a trifluoropropyl group, so fluorosili- cone rubber perfectly combines the advantages of fluorocarbon rubber (FKM) such as excellent oil resistance and high temperature work ability, and the advantages of silicone rubber (VMQ) such as good softness and outstanding low temperature and high temperature work ability. Fluorosilicone rubber is suitable for applications in low temperature, high temperature, and solvent resistant and oil Fluorosilicone Rubber (FVMQ) resistant environments.

Chemical structure:

$$\begin{array}{c} CH_{3} & CH_{3} & CH_{3} \\ \begin{pmatrix} I \\ Si \\ - \\ I \\ I \\ CH_{2}CH_{2}CF_{3} \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ Si \\ CH=CH_{2} \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ - \\ O \\ H \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ - \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ - \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ - \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}} \xrightarrow{\begin{array}{c} CH_{3} \\ I \\ O \\ H \end{array}$$

Product Features:

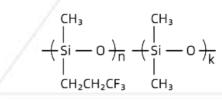
- > Easily processed; Easily pigmented.
- > Retaining properties over a wide temperature range of -60°C to 230°C.
- > Good anti-flammability.
- > Suitable to produce rubber compounds of many different durometers, Hardness (Shao A) 20-90.
- > Excellent oil resistance; outstanding apolar solvent resistance.
- > Designed to meet many standards including ASTM, D2000M | L-R-25988, BMS-1-530.

TFT LIMITED fluorosilicone products:

Product name	Grade	Product Introduction	
Fluorosilicone Raw Gum	Teflus [®] FSG	It is divided into raw gum for high temperature curing and raw gum for room temperature curing. High temperature curing raw gum is homopolymerized fluorosilicone raw gum Teflus [®] FSG-H100 and copolymer fluorosilicone raw gum Teflus [®] FSG-H200; Room temperature curing with raw gum homopolymerfluorosilicone raw gum Teflus [®] FSG-R100 and copolymer fluorosilicone raw gum Teflus [®] FSG-R100 and FSG FR	
Fluorosilicone Compound	Teflus [®] FSB	It is divided into general purpose Teflus [®] FSB-G100, low Compression Teflus [®] FSB-C200; High Tear Strength Tefl FSB-T100; Extrusion grade Teflus [®] FSB-E100.	
Fluorosilicone Oil	rosilicone Oil Teflus [®] FSL Compared with fluorosilicone rubber, it is a fluorosilicone polymer with a lower molect less than 400Pa·s. Which is including Hydroxyl terminated fluorosilicone oil Teflus [®] FS fluorosiliconeoil Teflus [®] FSL-200, vinylterminated fluorosilicone oil Teflus [®] FSL-300 an end group with vinylfluorosilicone oil Teflus [®] FSL-400.		

Fluorosilicone Rubber (RTV Copolymer) Teflus® FSG-R200

Chemical Structure:



Product Features:

> Liquid, easy-flowing, base polymer for putty/ adhesives/ sealants.

> Easy to blend with dimethicone.

Product Performance:

Property	Unit	Technical Standards				
		FSG-R201	FSG-R202	FSG-R203	FSG-R204	
Appearance	-	Colorless or slightly yellowish transparent liquid, no mechanical impurities.				
Density	g/cm³	1.15	1.08	1.00	1.15	
Viscosity	Pa·s	1-40		40-200		
pH value	-	Neutral				
Volatile Matter(3hr/180°C)	%		6		1	

*Each grade specifies the viscosity range, and the actual viscosity can be controlled at $\pm 10\%$ of the required viscosity Other data are typical values.

Product Application:

- > It is suitable for the matrix polymer of the bonding agent of fluorosilicone rubber and silicone rubber products, and the bonding agent of silicone rubber and fluororubber products.
- > It is suitable for medium oil resistance, solvent resistance, high and low temperature resistant putty, adhesive, sealant matrix polymer, such as fuel operating system support plate, need to be solvent clean parts sealed.

Package and Shipment:

- > PE plastic drum, available in 1 kg, 5 kgs, 10 kgs, or according to customers' requirements
- > It is shipped as non-dangerous liquid goods.

Storage:

- > It shall be stored in a dry ventilate place and its shelf life is one year.
- > It shall be stored in a neutral ventilate place to avoid contact with acidic or alkalic substances.

Handling Precautions and Safety Information:

> It is a non-dangerous goods with flash point (close cup) of over 101°C. It does not harm to eyes, skin, and other human organs.

> It is prohibited to heat this product in high temperature. Its highest contact temperature is 230°C. A higher temperature might decompose this product.

> It is prevented from contacting acidic or alkalic substances which will decompose this product.

> For other safety issues, please review MSDS of this product or contact the manufacturer.



Fluoro Organic Materials

We might adjust the grades and properties of our products without any further notices. If the up-to-date information is needed, please contact us.

Manufacturer:

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