

# TFT™ Fluorosilicone (FVMQ)

## Teflus® FS Series

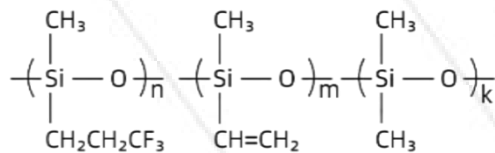
Teflus® FSG Series (Rubber Gum)		Teflus® FSB Series ( Rubber Base )	
Type	Teflus® FSG	Type	Teflus® FSB
RTV Homopolymer	FSG-R100	High Tear Strength	FSB-T100
HTV Homopolymer	FSG-H100	Extrusion	FSB-E100
RTV Copolymer	FSG-R200	General Purpose	FSB-G100
HTV Copolymer	FSG-H200	Low Compression	FSB-C200
Ex) Teflus® FSG series (FSG-R110, FSG-H230, ...)		Ex) Teflus® FSB series (FSB-T130, FSB-C281, ...)	

Teflus® FSL Series ( Oil )	
Type	Teflus® FSL
Hydroxyl	FSL-100
Methyl	FSL-200
Homopolymer Vinyl	FSL-300
Copolymer 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 fluorosilicone rubber introduces a trifluoropropyl group, so fluorosilicone 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:



## Product Features:

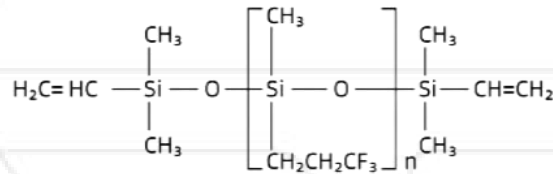
- > Easily processed; Easily pigmented.
- > Retaining properties over a wide temperature range of -60°C to 230°C.
- > Good anti-flammability.
- > Suitable to produce rubber compounds of many different durometers, Hardness (Shao A) 20-90.
- > Excellent oil resistance; outstanding apolar solvent resistance.
- > 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 <sup>®</sup> 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 <sup>®</sup> FSG-H100 and copolymer fluorosilicone raw gum Teflus <sup>®</sup> FSG-H200; Room temperature curing with raw gum homopolymerfluorosilicone raw gum Teflus <sup>®</sup> FSG-R100 and copolymer fluorosilicone raw gum Teflus <sup>®</sup> FSG-R200.
Fluorosilicone Compound	Teflus <sup>®</sup> FSB	It is divided into general purpose Teflus <sup>®</sup> FSB-G100, low Compression Teflus <sup>®</sup> FSB-C200; High Tear Strength Teflus <sup>®</sup> FSB-T100; Extrusion grade Teflus <sup>®</sup> FSB-E100.
Fluorosilicone Oil	Teflus <sup>®</sup> FSL	Compared with fluorosilicone rubber, it is a fluorosilicone polymer with a lower molecular weight and a viscosity of less than 400Pa.s. Which is including Hydroxyl terminated fluorosilicone oil Teflus <sup>®</sup> FSL-100, methyl-terminated fluorosilicone oil Teflus <sup>®</sup> FSL-200, vinylterminated fluorosilicone oil Teflus <sup>®</sup> FSL-300 and copolymer branched and end group with vinylfluorosilicone oil Teflus <sup>®</sup> FSL-400.

# Fluorosilicone oil (Homopolymer Vinyl Terminated) Teflus® FSL-300

## Chemical Structure:



## Product Features:

- > The end group has a reactive vinyl group, which is easy to participate in the reaction.
- > With high vinyl content. It is easy to adjust the total content of vinyl in compound and sealant.

## Product Performance:

Property	Test Method	Unit	Technical Standards			
			FSL-301	FSL-302	FSL-303	FSL-304
Appearance	Vision	-	Colorless transparent liquid			
Density(25°C)	GB/T 1884	g/cm <sup>3</sup>	1.25-1.30	1.25-1.30	1.25-1.30	1.25-1.30
Viscosity(25°C)	GB/T 10247	Pa·s	0.1-1	1-10	10-100	> 100
Flash Point(open cup)	GB/T 3536	°C	> 260	> 260	> 260	> 260
pH Value	-	-	6-7			

## Product Application:

- > Vinyl terminated fluorosilicone oil with low viscosity is suitable to be used as: mold releasing agent with resistance to corrosion and solvents; reactive diluent for fluorosilicone rubber vulcanization; necessary additive in processing fluorosilicone rubber.
- > Vinyl terminated fluorosilicone oil with high viscosity is mainly used in the production of addition type fluorosilicone rubber.

## Package and Shipment:

- > PE plastic drum, available in 5 kg, 10 kgs, 20 kgs, or according to customers' requirements
- > It is shipped as non-dangerous liquid goods.

## Storage:

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

## Handling Precautions:

- > It is a non-dangerous goods with flash point ( open cup) of over 260°C. It does no harm to eyes, skin, or other human organs.
- > It is prohibited to heat this product in high temperature. Its highest contact temperature is 150°C. A higher temperature might volatile this product.
- > For other safety issues, please review MSDS of the product or contact sales representatives.



**TFT LIMITED**

## **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.**

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