

SFGF Series peroxide-cured fluoroelastomer

Production Description

SFGF series is easy processing, peroxide cured 70% fluorine copolymer of hexafluoropropylene, vinylidene fluoride, and tetrafluorethylene with a cure site monomer.

Product Properties

Property		Typical Data			
		SFGF20	SFGF30	SFGF40	SFGF50
Raw Gum	Appearance	Off White Sheet			
	Specific Gravity, g/cm ³	1.89	1.90	1.90	1.91
	Mooney Viscosity (ML1+10@121°C)	15	25	35	45
Vulcanized Fluoroelastomer	Tensile Strength, MPa	18	18.5	19	19
	Elongation at Break, %	240	230	250	260
	Hardness (Shore A)	76	77	77	78
	Compression Set, % (ASTM, Method B, Compression Ratio 25%, 200°C×70h)	28	35	38	40
	Resistance Methyl alcohol (23°C×70h) Weight Loss, %	3.0	3.0	2.5	2.0

Note: the appraisal recipe we adopt is the peroxide curing system (double 2.5/TAIC).
The information herein is the typical data but not for specifications.

Main Properties Introduction

SFGF series is non-toxic, odorless, non-flammable, self-extinguishing. The series has good storage stability. The peroxide cure system SFGF series provides fast cure rates and excellent physical properties. The vulcanizates have exceptionally good resistance to heat, acid, methanol, water etc. In the harsh media environment, peroxide crosslinked SFGF has a wider application compared to the other polymers cured with bisphenol for their enhanced resistance to aggressive automotive internal working environment. Meanwhile SFGF series also exhibits better adhesion to the other kinds of rubbers as well. The substantially better processing is also another good property of SFGF.

Applications

In the chemical industry: be used as the flexible connecting parts of pipelines, heat exchanger gaskets, pump parts, O-rings and fuel cell seals; in iron and steel industry: replace solvent cleaning roller; in the semiconductor industry: used as vacuum pipeline O-ring, gasket, etc.; for automobile industry, resist acid gasoline, MTBE gasoline and 50 ~ 100% methanol gasoline. SFGF series are used to manufacture more and more valve stem seals to resist corrosion of the new generation oil in the crankcase and to protect the continuous heating and high speed running engine, to avoid excessive fuel consumption and prevent the toxic phosphorus accumulation in catalytic converter. Peroxide crosslinking SFGF can also be applied to automotive engine cooling sealing parts to resist water, steam and hot water; SFGF series can satisfy the extreme aggressive working environments in oil field like the high pressure up to 70 ~ 100MPa, 180 ~ 230°C or even higher temperature, the mist contains H₂S, CH₄ and even the chlorine water vapor etc. The application of SFGF can improve the reliability and working life of the equipments in oil field, reduce the downtime and maintenance costs.

Packaging and storage

Packed in a polyethylene bag, each bag is 5kg net weight, five bags in a carton, each carton net weight 25kg.

Non hazardous chemicals, avoid the sun and moisture.

Should be stored in a cool, dry environment, the shelf life can be two years from the date of production, Over the storage period, re-inspection is necessary before use.