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EUREN

High Performance

FKM Precompound
FFKM Compound
HNBR Compound
ACM Compound

Automobile

Engergy

Medical

Manufacturing Industry

EUREN

High Preformance FKM Precompound and FFKM Compound

According to customer needs, we design the corresponding formula on the basis of FKM and FFKM raw rubber, add curing agent, accelerator and other processing aids. According to the curing system, FKM precompound is mainly divided into bisphenol AF and peroxide-cured.

The main uses are:

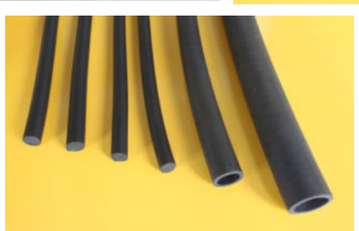
- O-rings and gaskets
- Metal bonding oil seal
- Extrusion hose
- For high fluorine requirements
- For low temperature environment

Our Advantage :

- High performanec and extreme stability for our precompound
- Nearly 30 years of technical experience in the FKM industry
- Cost-effective
- QR code digital management process
- Automated production process with man-machine docking mode for key processes

What can we do for you :

- Customized production of precompounds and compounds
- Customized various FKM, FFKM, HNBR, ACM products, such as O-ring，automobile hoses and seals of resistance to steam etc
- Designing and development of special FKM and FFKM products



Seeking cooperation

building long-term partnership

Providing the best products and services

EUREN

FKM Precompound

Type	Category	Model No.	Precompound Properties									Processing Technology						Product Descriptioin and Characteristics	Coresponding Other Model No.			
			Mooney VIscosity ML(1+10) @121°C	Density g/cm3	Flourine Content F%	Compression Rate 70h @200°C %	Low Temperature Resilience TR10 °C	Hardness Shore A	Tensile Strength Mpa	Elogation %	Volume Change Rate Fuel C 70h@23°C %	Compression Molding	Transfer Molding	Injection Molding	Pre-molding	Extrusion Molding	Metal Viscosity	Test Compound: Precompound: 100 N990: 30 MgO: 3 Ca(OH)$_2$: 6 Press curing: 177℃x10min, Over curing: curing: 230℃x24h. Test Compound: raw gum: 100 N990: 30 ZnO: 3 101XL 45: 3 TAIC: 4 Press curing: 177℃x10min, second-stage: curing: 230℃x4h.	Viton	Daikin	Dyneon	Solvay
Bisphenol AF	FKM for O-ring and gasket	QFC-201P	20	1.81	66	16	-17	78	13.2	180	3.0	O	O	O	O	O		Excellent in-mold fluidity, mold release, small permanent compression deformation, suitable for very small products	A201C	G7251	FE5620Q	FOR432
		QFC-301P	30	1.81	66	16	-17	78	14.1	200	3.0	O	O	O	O	O		Excellent in-mold fluidity, mold release, small permanent compression deformation, suitable for very small products		G701		
		QFC-401P	40	1.81	66	15	-17	77	15	200	3.0	O	O		O			Excellent compression molding properties, low permanent compression set, suitable for most products	A401C	G716	FE5640Q	
		QFC-601P	60	1.81	66	13	-17	78	15.5	190	3.0	O						Larger products suitable for compression molding	A601C		FE5660Q	
		QFC-901P	90	1.81	66	9	-17	79	17.3	230	3.0	O						High Mooney viscosity, especially low permanent compression set, suitable for extra-large products in flat plate molding				
	FKM for adhesive Products	QFC-261P	25	1.81	66	23	-17	73	13.6	230	3.1	O	O	O	O	O	O	Excellent solubility, excellent metal bonding, suitable for very small bonding products.			FC2123	
		QFC-361P	35	1.81	66	20	-17	75	14.5	240	3.1	O	O	O	O	O	O	Excellent tear resistance and adhesion to metal skeletons, suitable for most general size bonded products.	A361C	G763	FC2177	
		QFC-461P	42	1.81	66	20	-17	75	15	260	3.1	O	O		O		O	Better tear resistance than 361P, suitable for larger size bonded products.			FC2144	
		QFC-661P	60	1.81	66	19	-17	75	15.8	280	3.1	O					O	Excellent demouding performance, tear resistance and adhesion to metal skeleton, suitable for thick and large bonded products				
	FKM for complex special-shaped parts	QFC-331P	30	1.81	66	24	-17	73	14.1	260	3.1	O	O	O	O	O		Excellent in-mold fluidity and thermal resistance, high elongation,	A331C		FC2176	FOR5351
		QFC-531P	50	1.81	66	23	-17	74	15.6	300	3.1	O	O		O			High elongation at break, excellent processability and thermal tear resistance.			FC2152	
	FKM for extrusion products	QFC-25EP	25	1.81	66	20	-17	77	14.3	245	3.1			O		O		Excellent extrusion performance, suitable for extrusion products such as strip tubes.		G755	FC2120	
	FKM for O-ring and gasket	QFB-201P	20	1.85	68.5	26	-13	82	12.7	200	2.1	O	O	O	O	O		Excellent in-mold flow and release properties, suitable for injection molding and molding of very small parts				
		QFB-301P	35	1.85	68.5	25	-13	79	13	210	2.1	O	O	O		O	O	The permanent compression deformation is small, suitable for small-sized products by compression molding or general products by injection molding				
		QFB-401P	40	1.86	68.5	23	-13	79	13.5	220	2.1	O	O		O			Small permanent compression set, suitable for general size products by compression molding			FE5840Q	
		QFB-601P	60	1.86	68.5	22	-13	78	14.5	225	2.1	O						Suitable for thick and large products	B601C			
		QFH-401P	45	1.9	70	30	-7	81	12.5	215	1.5	O			O			Suitable for general-purpose products, outstanding medium resistance and low temperature brittleness.			FE5840Q	
	FKM for adhesive products	QFB-361P	32	1.86	68.5	31	-13	77	13.6	280	2.1	O	O	O	O	O	O	Excellent tear resistance and adhesion to metal skeletons, suitable for most general size bonded products.				
		QFB-461P	45	1.86	69	29	-13	77	14	270	2.1	O	O		O		O	Better tear resistance than 361P, suitable for larger size bonded products.				
		QFB-661P	60	1.86	69	28	-13	78	14.5	310	2.1	O					O	Excellent demoulding performance, tear resistance and adhesion to metal skeleton, suitable for thick and large bonded products				
		QFH-361P	35	1.89	70	34	-6	79	12.6	300	1.5	O	O	O	O	O	O	Excellent tear resistance and adhesion with metal skeleton, excellent medium resistance and good low temperature brittleness.				
	FKM for complex special-shaped parts	QFB-231P	25	1.85	68.5	33	-13	73	13	280	2.1	O	O	O	O	O		Excellent in-mold fluidity and thermal resistance, high elongation, suitable for smaller products.				
		QFB-431P	40	1.85	68.5	32	-13	74	13.5	320	2.1	O	O	O	O			High elongation at break, excellent processing properties and hot tearing. Suitable for most products.				
	new product	QFC-50A	70	1.81	66	26	-17	50	7.3	560	3.1	O	O	O	O			Very low hardness, good flow and moldability, free of secondary curing.				
		QFC-362P	30	1.81	66	20	-17	75	13.5	240	3.1	O	O	O	O	O	O	On the basis of 361, the anti-blocking effect of two-stage vulcanization is improved.				
peroxide-cured	Raw rubber (preprocessed)	QFGF-20	20	1.89	69.5	30	-7	81	18	200	/		O	O	O	O		Resistant to water vapor, acid and most gas-liquid media. It is also suitable for the inner layer of the winding silicone composite pipe.				P459
		QFGF-40	40	1.9	70	17	-7	81	22	190	/	O	O	O	O		O	Resistant to water vapor, acid and most gas-liquid media. Good mold release and mold venting				
		QFGF-60	60	1.9	70	16	-7	80	23	200	/	O	O	O	O		O	Resistant to water vapor, acid and most gas-liquid media. Good mold release.				P959
		QFLT-240	40	1.8	65	28	-20	76	20	200		O	O	O	O		O	Resistant to water vapor, acid and some gas-liquid media. Good low temperature properties.				
		QFLT-340	40	1.79	64	29	-30	79	14	160		O	O	O	O		O	Resistant to water vapor, acid and some gas-liquid media. Good low temperature properties.„				
	FFKM Compound	QFF-3157	/	2.1	/	21	-10	70	17	180	0.0	O	O	O	O			Resistant to almost all chemical media including ketones and esters. Good exhaust, easy demoulding, and excellent workability. Chemical semiconductor seals				PL958
		QFF-3158	/	2.0	/	21	-10	80	18.5	160	0.0	O	O	O	O			Resistant to almost all chemical media including ketones and esters. Good exhaust, easy demoulding, and excellent workability. Chemical semiconductor seals				PL855

The above specifications do not represent all our specifications. We can accept customization from customers, and can also carry out precise design according to the technical requirements provided by customers, the type and shape of products, or the use environment and sealing requirements.
NOTE: Cured properties depend on formulation, including curing system and filler type and proportion, as well as curing conditions. The performance data in this table is the typical properties of the product, not as the technical specification of the product.

FKM Precompound
QFC-261P
QFC-331P
QFB-231P

Precompound QFC-261P for very small adhesive products

Product Description	
Composition	Very low Mooney fluororubber precompound (with curing agent)
Features	Excellent flow, tear resistance and adhesion
Typical uses	Very small oil seals and skeleton bonding products, coated calendered products
Processing technology	Injection, molding, transfer molding, extrusion molding, coating calendering
Curing system	Bisphenol AF

Properties	Typical Value
Fluorine content, %	66
Density	1.81
Color	White
Solubility	Low molecular weight ketones and esters
Mooney viscosity ML 1+10@121℃	25
TR10 ℃	-17
Test Standard Recipes	
Precompound	100
Carbon Black（N990)	30
Magnesium oxide	3
Calcium hydroxide	6
Typical Curing Properties	
Monsanto Moving Die Rheometer (MDR2000®)	
100cpm, 0.5°Arc, 10 minutes, 177℃	
ML, Min. Torque，dNm	0.61
ts2,	1'05"
t’ 90,	2.28"
MH, Max. Torque，dNm	12.10
Typical Physical Properties	
Press curing at 170°C for 10 minutes	
Over curing at 230°C for 24 hours	
Tensile Strength (ASTM D412)，Mpa	13.6
Elongation (ASTM D412)，%	230
Hardness (ASTM D2240)，Shore A	73
Volume change rate（Fuel C70h@23℃），%	3.1
Compression Rate, [ASTM D395 Method B (Disc)]	
70h @ 200℃，%	23

Precompound QFC-331P and QFB-231P for complex special-shaped parts

Product Description	
Composition	Low Mooney FKM precompound (with curing agent)
Features	Good fluidity, high elongation, good tear resistance
Typical uses	Complex shaped parts, smaller products with high demolding rejects
Processing technology	Injectioin, extrusion, overmolding
Curing system	Bisphenol AF

Properties	Typical Value	
	QFC-331P	QFB-231P
Fluorine content, %	66	68.5
Density	1.81	1.85
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	30	25
TR10 ℃	-17	-13
Test Standard Recipes		
Precompound		100
Carbon Black（N990)	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	1.11	1.01
ts2,	0'50"	0'55"
t’ 90,	2'56"	3'18"
MH, Max. Torque，dNm	11.23	10.10
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	14.1	13
Elongation (ASTM D412)，%	260	280
Hardness (ASTM D2240)，Shore A	73	73
Volume change rate	3.1	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	24	33

FKM Precompound
QFC-361P
QFB-361P
QFH-361P
QFC-401P
QFB-401P

Precompound QFC-361P, QFB-361P, QFH-361P for adhesive products

Product Description	
Composition	Middle Mooney FKM precompound (with curing agent)
Features	Good fluidity, easy to bond, good tear resistance
Typical uses	Oil seals and skeleton bonding products
Processing technology	Injectioin, extrusion, overmolding
Curing system	Bisphenol AF

Properties	Typical Value		
	QFC-361P	QFB-361P	QFH-361P
Fluorine content, %	66	68.5	70
Density	1.81	1.86	1.89
Color	White	white	white
Solubility	Low molecular weight ketones and esters		
Mooney viscosity ML 1+10@121℃	35	32	35
TR10 ℃	-17	-13	-7
Test Standard Recipes			
Precompound		100	
Carbon Black（N990）	phr	30	
Magnesium oxide	phr	3	
Calcium hydroxide	phr	6	
Typical Curing Properties			
Monsanto Moving Die Rheometer (MDR2000®)			
100cpm, 0.5°Arc, 10 minutes, 177℃			
ML, Min. Torque，dNm	0.98	1.01	1.21
ts2,	1'50"	1'15"	1'15"
t’ 90,	2'18"	2'28"	3'28"
MH, Max. Torque，dNm	16.23	15.10	16.10
Typical Physical Properties			
Press curing at 170°C for 10 minutes			
Over curing at 230°C for 24 hours			
Tensile Strength (ASTM D412)，Mpa	14.5	13.6	12.6
Elongation (ASTM D412)，%	240	280	300
Hardness (ASTM D2240)，Shore A	75	77	79
Volume change rate	3.1	2.1	1.5
Compression Rate, [ASTM D395 Method B (Disc)]			
70h @ 200℃，%	20	31	34

Precompound QFC-401P and QFB-401P for O-ring and gasket

Product Description	
Composition	Middle Mooney FKM precompound (with curing agent)
Features	Good rheological properties and low permanent compression set
Typical uses	O-ring and gasket
Processing technology	Compression molding
Curing system	Bisphenol AF

Properties	Typical Value	
	QFC-401P	QFB-401P
Fluorine content, %	66	68.5
Density	1.81	1.86
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	40	40
Test Standard Recipes		
Precompound		100
Carbon Black（N990）	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	1.59-2.10	
ts2,	1'10"	
t’ 90,	2'25"	
MH, Max. Torque，dNm	23.50	
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	15	13.5
Elongation (ASTM D412)，%	200	220
Hardness (ASTM D2240)，Shore A	77	79
Volume change rate	3	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	15	23

FKM Precompound
QFC-461P
QFB-461P
QFC-531P
QFB-431P

Precompound QFC-461P and QFB-461P for complex special-shaped parts

Product Description	
Composition	Middle and high Mooney FKM precompound (with curing agent)
Features	Easy to bond, better tear resistance
Typical uses	Larger than 361P for oil seals and skeleton bonding products
Processing technology	Eextrusion, overmolding
Curing system	Bisphenol AF

Properties	Typical Value	
	QFC-461P	QFB-461P
Fluorine content, %	66	69
Density	1.81	1.86
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	42	45
TR10 ℃	-17	-13
Test Standard Recipes		
Precompound		100
Carbon Black（N990）	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	1.68	1.71
ts2,	1'08"	1'05"
t’ 90,	2'18"	2'38"
MH, Max. Torque，dNm	17.23	18.10
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	15	14
Elongation (ASTM D412)，%	260	270
Hardness (ASTM D2240)，Shore A	75	77
Volume change rate	3.1	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	20	29

Precompound QFC-531P and QFB-431P for complex special-shaped parts

Product Description	
Composition	Middle and high Mooney FKM precompound (with curing agent)
Features	High elongation, good tear resistance
Typical uses	Complex shaped parts, products with high demolding rejects
Processing technology	Molding, overmolding, Preforming
Curing system	Bisphenol AF

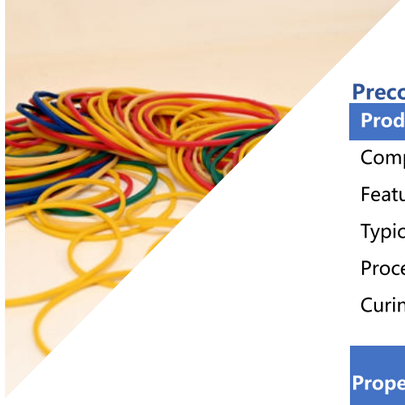
Properties	Typical Value	
	QFC-531P	QFB-431P
Fluorine content, %	66	68.5
Density	1.81	1.85
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	50	40
TR10 ℃	-17	-13
Test Standard Recipes		
Precompound		100
Carbon Black（N990）	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	2.01	1.65
ts2,	0'50"	0'55"
t’ 90,	2'26"	2'38"
MH, Max. Torque，dNm	22.89	21.10
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	15.6	13.5
Elongation (ASTM D412)，%	300	320
Hardness (ASTM D2240)，Shore A	74	74
Volume change rate	3.1	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	23	32

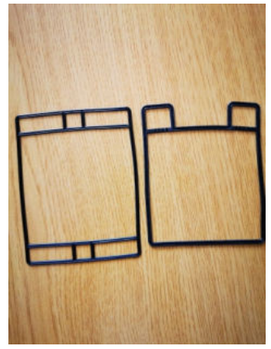
FKM Precompound
QFC-601P
QFB-601P
QFC-661P
QFB-661P

Precompound QFC-601P and QFB-601P for O-ring and gasket

Product Description	
Composition	Middle and high Mooney FKM precompound (with curing agent)
Features	Good mechanical properties and low permanent compression set
Typical uses	O-ring and gasket
Processing technology	Compression molding
Curing system	Bisphenol AF

Properties	Typical Value	
	QFC-601P	QFB-601P
Fluorine content, %	66	68.5
Density	1.81	1.86
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	60	60
Test Standard Recipes		
Precompound		100
Carbon Black（N990）	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	2.5-2.80	
ts2,	1'10"	
t’ 90,	2'25"	
MH, Max. Torque，dNm	25.3	
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	15.5	15.0
Elongation (ASTM D412)，%	190	210
Hardness (ASTM D2240)，Shore A	78	79
Volume change rate	3	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	13	23



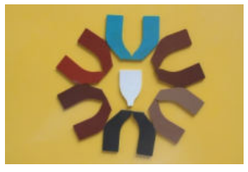


Precompound QFC-661P and QFB-661P for thick and large adhesive products

Product Description	
Composition	High Mooney FKM precompound (with curing agent)
Features	Easy to bond, better tear resistance
Typical uses	Thick and large oil seals and skeleton bonding products
Processing technology	Moulding, overmolding
Curing system	Bisphenol AF

Properties	Typical Value	
	QFC-661P	QFB-661P
Fluorine content, %	66	69
Density	1.81	1.86
Color	White	white
Solubility	Low molecular weight ketones and esters	
Mooney viscosity ML 1+10@121℃	60	60
TR10 ℃	-17	-13
Test Standard Recipes		
Precompound		100
Carbon Black（N990）	phr	30
Magnesium oxide	phr	3
Calcium hydroxide	phr	6
Typical Curing Properties		
Monsanto Moving Die Rheometer (MDR2000®)		
100cpm, 0.5°Arc, 10 minutes, 177℃		
ML, Min. Torque，dNm	2.01	2.11
ts2,	1'18"	1'15"
t’ 90,	2'21"	2'28"
MH, Max. Torque，dNm	21.23	20.10
Typical Physical Properties		
Press curing at 170°C for 10 minutes		
Over curing at 230°C for 24 hours		
Tensile Strength (ASTM D412)，Mpa	15.8	14.5
Elongation (ASTM D412)，%	280	310
Hardness (ASTM D2240)，Shore A	75	78
Volume change rate	3.1	2.1
Compression Rate, [ASTM D395 Method B (Disc)]		
70h @ 200℃，%	19	28

FFKM Compound
QFR-100
QFR-110
QFR-290



FFKM raw gum/curing monomer contains iodine group QFR-100

Production Description:
QFR-100 is a chemically resistant perfluoroelastomer. Offers a wide range of corrosive media sealing capabilities as well as excellent compression set value.

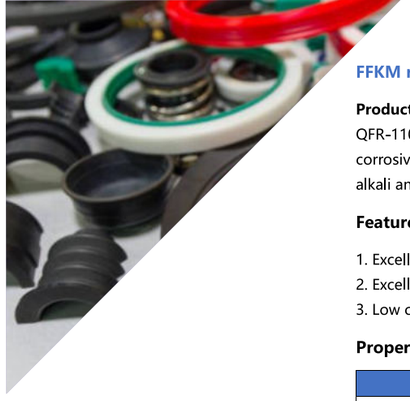
Features:

1. Excellent heat resistance, applicable temperature range -10℃～230℃.
2. Excellent oil resistance, corrosion resistance and solvent resistance.
3. Low compression deformation

Properties:

Item			unit	103	106	109	Testing Method
Raw Gum	Mooney viscosity ML (1+10′), 121°C		MU	15-45	46-75	76-120	ASTM D1646
	Exterior		/	semitransparent			Visual Inspection
	Density		g/cm³	2.04			ASTM D792
	Fluorine Content		%	72.7			Oxygen cylinder combustion method
Curing Gum	Curing Curve (155℃*15min)	MH	dN.m	26.3	27.5	28.1	ASTM D1646
		ML	dN.m	0.7	0.9	1.5	
		Ts2	min:s	1:10	1:13	1:20	
		T90	min:s	6:40	6:43	6:52	
	Hardness		Shore A	72	73	74	ASTM D2240
	Tensile Strength		MPa	18.9	19.1	19.0	ASTM D412
	Elogation		%	143	141	138	ASTM D412 DIEC
	Compression rate 200℃×70hr，25%		%	28	28	27	ASTM D412 DIEC

Note 1: The above test data are typical values and are for reference only, not as a product test report.



FFKM raw gum/curing monomer contains iodine group QFR-110

Production Description:
QFR-110 is a chemically resistant perfluoroelastomer. Capable of sealing against a wide range of corrosive media as well as excellent compression set value, it is more resistant to water vapor, alkali and other media than the QFR-110 standard type.

Features:

1. Excellent heat resistance, applicable temperature range -10℃～230℃.
2. Excellent oil resistance, corrosion resistance and solvent resistance.
3. Low compression deformation

Properties:

Item			unit	113	116	119	Testing Method
Raw Gum	Mooney viscosity ML (1+10′), 121°C		MU	15-45	46-75	76-120	ASTM D1646
	Exterior		/	semitransparent			Visual Inspection
	Density		g/cm³	2.04			ASTM D792
	Fluorine Content		%	72.7			Oxygen cylinder combustion method
Curing Gum	Curing Curve (155℃*15min)	MH	dN.m	22.3	23.5	24.6	ASTM D1646
		ML	dN.m	0.7	0.9	1.5	
		Ts2	min:s	4:25	4:43	1:10	
		T90	min:s	6:20	6:50	6:45	
	Hardness		Shore A	72	73	74	ASTM D2240
	Tensile Strength		MPa	17.9	18.1	18.5	ASTM D412
	Elogation		%	163	171	188	ASTM D412 DIEC
	Compression rate 200℃×70hr，25%		%	28	28	27	ASTM D412 DIEC

Note 1: The above test data are typical values and are for reference only, not as a product test report.

FFKM raw gum/ High temperature peroxygen QFR-290

Production Description:
QFR-290 is a chemically resistant perfluoroelastomer. It has a wide range of corrosive medium sealing ability and excellent compression set value. It has better high temperature resistance than 1000 type perfluoroether rubber, and the long-term use temperature reaches 290 degrees.

Features:

1. Excellent heat resistance, applicable temperature range -10℃～290℃.
2. Excellent oil resistance, corrosion resistance and solvent resistance.
3. Low compression deformation

Properties:

Item			unit	293	296	299	Testing Method
Raw Gum	Mooney viscosity ML (1+10′), 121°C		MU	15-45	46-75	76-120	ASTM D1646
	Exterior		/	semitransparent			Visual Inspection
	Density		g/cm³	2.04			ASTM D792
	Fluorine Content		%	72.7			Oxygen cylinder combustion method
Curing Gum	Curing Curve (170℃*15min)	MH	dN.m	26.3	27.5	28.6	ASTM D1646
		ML	dN.m	0.7	0.9	1.5	
		Ts2	min:s	1:10	1:13	1:20	
		T90	min:s	6:40	6:43	6:52	
	Hardness		Shore A	72	73	74	ASTM D2240
	Tensile Strength		MPa	15.9	16.1	17.0	ASTM D412
	Elogation		%	163	171	178	ASTM D412 DIEC
	Compression rate 290℃×70hr，25%		%	38	36	35	ASTM D412 DIEC

Note 1: The above test data are typical values and are for reference only, not as a product test report.

FFKM Compound QFR-3150

FFKM raw gum/curing monomer contains cyano group QFR-3150

Production Description:

FFKM QFR-3150 is a new type of perfluoroelastomer that provides excellent heat resistance, broad media resistance, low compression set and strong seal retention at extreme temperatures.

Features:

1. Excellent heat resistance, applicable temperature range -10℃～315℃.
2, a wide range of chemical resistance properties.
3. Excellent anti-plasma performance.
4. Low compression deformation.

Properties:

Item			unit	3153	3155	3159	Testing Method
Raw Gum	Mooney viscosity ML (1+10′), 121℃		MU	15-45	46-75	76-120	ASTM D1646
	Exterior		/	semitransparent			Visual Inspection
	Density		g/cm³	2.04			ASTM D792
	Fluorine Content		%	72.2			Oxygen cylinder combustion method
Curing Gum	Curing Curve (170℃*30min)	MH	dN.m	15.3	16.2	16.9	ASTM D1646
		ML	dN.m	0.86	1.15	1.53	
		Ts2	min:s	4:25	4:43	4:50	
		T90	min:s	13:56	14:13	14:22	
	Hardness		Shore A	70	73	74	ASTM D2240
	Tensile Strength		MPa	19.5	20.4	21.0	ASTM D412
	Elogation		%	150	141	140	ASTM D412 DIEC
	Compression rate 290℃×70hr，25%		%	28	29	29	ASTM D412 DIEC

Note 1: The above test data are typical values and are for reference only, not as a product test report. Vulcanized rubber test data formula: 100 parts of QFR-3150, 1.2 parts of BOAP, 20 parts of N-990 carbon black.

Instructions:

1. It is recommended to add 1.2 parts of BOAP per 100 parts of QFR-3150.
2. Recommended curing temperature and time: molding curing: 170℃×30min; two-stage curing: 290℃*(8+16)h.

Applications:

1. Mainly used in high temperature chemical industry, aerospace industry, organic matter processing industry and semiconductor manufacturing industry.
2. For the manufacture of components resistant to chemical media (such as acids, caustic alkalis, ketones, aldehydes, esters, ethers, alcohols, solvents, etc.).
3. Various types of elastic sealing elements can be manufactured, such as O-rings, gaskets, valve bodies, diaphragms, etc.

Product packaging:

1. Packed in plastic film, 1kg per pack. Or packaged according to customer needs.

Product Shipping:

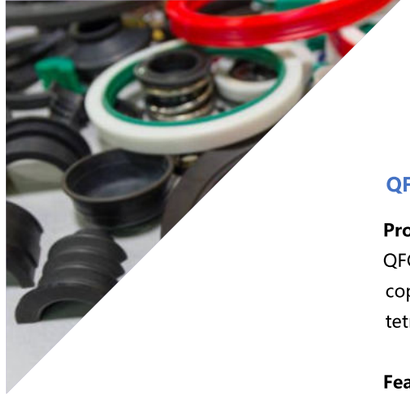
1. It is transported as non-dangerous goods solid.
2. It should be well packaged during transportation.

Product storage:

1. Store at room temperature in a dry and ventilated environment, valid for one year.
2. The storage environment should be neutral, and it is forbidden to contact with amines.

Safety Precautions:

1. Routine care and precautions should be taken to avoid skin contact, eye contact and inhalation of fumes.
2. For other safety matters, please refer to the material safety data sheet, or contact our company.



QFGF Series Prexoide-cured

QFGF Series Peroxide-cured Fluoroelastomer

Production Description:

QFGF-series F-rubber is high fluorine-contained（70%） superoxide vulcanized rubber, which is copolymerized with hexafluoropropylene monomer, Vinylidene Fluoride monomer, tetrafluoroethylene monomer and vulcanization monomer.

Feature:

1. Fast vulcanization rate and excellent physical performances:
2. Excellent performances of thermal resistance, acid resistance, methanol tolerance and water resistance as well as tolerance to other chemical mediums;
3. Good adhesion property among dissimilar materials;
4. Better manufacturability.

Product properties

	Properties	Typical Values		
		QFGF20	QFGF40	QFGF60
	Appearance	White Slice		
	Specific Gravity , g/cm3	1.89	1.90	1.90
Raw Gum	Mooney viscosity	20	40	50
	Tensile strength, MPa	18	22	23
	Elongation at break,	200	190	200
	Hardness (Shore A)	77	79	79
Curing Gum	Compression set, % (ASTM, method B, Compression Ratio 25%, 200℃× 70h), %	16	17	16
	Resistance Methyl (23℃×70h) weight loss, %	3.0	2.5	2

Note : We adopt the peroxide curing system to assess the recipe(DBPH 2.5/TAIC).The information herein is the typical data but not for specifications.

The application of the product

In the chemical industry, it is applied in dynamic interconnecting part of pipeline, heat exchanger, gasket, pump accessory, O ring and fuel cell seal. In the iron and steel industry, it is used to replace solvent to clean the roller. In the semiconductor industry, it is applied in seal ring, gasket of vacuum piping. In the automobile industry, it has good performances of acid & alkali, MTBE gasoline and 50~100% methanol gasoline resistance.

QFGF-series products are increasingly used in valve stem seal to resist corrosion of oil from crankcase, protect continuous-heating and high-speed running engine, avoid excessive fuel oil consumption and prevent accumulation of toxic phosphorus. Peroxide crosslinking QFGF also can be applied in water, steam and hot water-resisting cooling seal of automobile engine.

QFGF series products also suit extremely bad working environment in oil field, such as 70～100MPA high pressure, 180～ 230℃ or even higher temperature, fog that contains H2S， CH4 and even chlorinated steam. The application of QFGF can enhance the reliability and working life of oil field equipment, reduce downtime and maintenance cost.

Packaging and storage

The rubber is packed in plastic film bag with 5kg net weight, each carton net weight is 25kg. It is non-hazardous chemical, avoiding exposure and humidity. It should be stored in a cool, dry environment. If storage time more than 2 years please re-test before use.