

# FLTCHFLON™ Fluoroelastomer Precompound/Perfluoroelastomer Selection Guide

Grade	Typical Properties									Process					Description	Typical Applications
	Nominal Viscosity ML (1+10)	Specific Gravity g/cm3	Fluorine Content F%	Tensile (MPa)	Elongation (%)	Hardness Shore A	Compression Set, % 70h @ 200°C	TR10 °C	Volume Change Fuel C 23°C*70h	Compression	Transfer	Injection	Extrusion	Calendering		
<b>F Series: Bisphenol Copolymer series, Miscellaneous applications with the balanced properties between the performance and the processing properties.</b>																
F201A	25	1.83	66	13	220	78	16	-17	4.0%		O	O	O		Excellent mold flow, improve mold release and good compression set, good injection molding process	O-rings, gaskets, Injection molding parts
F301A	30	1.83	66	14	220	77	17	-17	3.9%	O	O	O	O		Excellent mold flow, improve mold release and good compression set	O-rings, gaskets, some sealing parts required low compersion set
F401A	40	1.83	66	15	210	76	15	-17	3.8%	O				O	Excellent mold release, low compression set, good compression molding process, FDA/LFGB certified grade	O-rings, gaskets, some FDA sealing parts
F501A	50	1.83	66	15.3	230	76	16	-17	3.8%	O					Excellent mold release, low compression set, good compression molding process, Improved mechanical property	O-rings, gaskets, sealing parts
F601A	60	1.83	66	16.2	220	77	13	-17	3.5%	O					Excellent mold release, very low compression set	O-rings, gaskets, some sealing parts required low compersion set
F901A	90	1.83	66	17.8	240	77	11	-17	3.5%	O					Excellent mold release, very low compression set	O-rings, gaskets, compression molding parts
F375B	32	1.82	66	14.5	250	77	20	-17	3.7%	O	O	O	O	O	Excellent mold flow, hot tear resistance, improve bonding adhesion	Valve stem Oil seals, shaft seals and complicated geometries
F475B	40	1.83	66	15	230	75	19	-17	4.0%	O	O				Excellent mold flow, hot tear resistance, improved bonding adhesion, improved abrasive resistance	Valve stem Oil seals, shaft seals and complicated geometries
F561B	55	1.83	66	15.7	260	78	21	-17	4.0%	O					Excellent mold flow, hot tear resistance, improve bonding adhesion	Oil seals, Oil shaft seals or some parts required bonding property
F445C	40	1.83	66	14.3	250	75	18	-17	4.0%	O	O				Excellent mold flow and hot tear resistance, improved mold release, better elongation property	Very Complicated shape rubber parts like valve, bellows
F201E	22	1.84	66	13	250	75	25	-17	4.0%				O		Excellent extrusion behavior, low die swelling	Hose and other extrusion parts
<b>T and HT TL Series: Bisphenol Terpolymer series, Better resistance to heat &amp; chemicals, as well as good resistance to compression set.</b>																
T401A	40	1.85	68	14.5	240	78	28	-13	3.0%	O	O				Excellent compression, good processing property, suitable for Compression molding	General purpose, O-rings and gaskets, moulded parts
T601A	60	1.85	68	15.4	230	79	24	-13	3.0%	O					With the mooney ranged from Medium to high, Best balance for the compression set and chemical resistance	General purpose, O-rings and gaskets, moulded parts
T301B	35	1.86	68	13.5	250	77	35	-13	3.0%	O	O		O	O	Excellent mold flow, Excellent resistance, improve bonding adhesion	Multi-purpose, oil seals, shaft seals, valve seals required bonding adhesion
T401B	40	1.86	68	14.6	260	77	35	-12	2.0%	O				O	Excellent mold flow and mold release, Excellent chemical resistance, improve bonding adhesion	Multi-purpose, oil seals, shaft seals, valve seals required bonding adhesion
T401C	46	1.86	68	14.2	270	77	26	-12	2.0%	O	O				Good processability, Low compression set, suitable for compression molding	General purpose, O-rings and gaskets, moulded parts
T 201E	27	1.86	69	13.1	300	76	35	-12	2.0%		O		O		Excellent extrusion behavior, low die swelling and very low permeability	Fuel hose which required bonded with ECO, extruded hose
HT 501C	50	1.89	70	14.8	250	79	39	-9	1.2%	O					With the mooney ranged from Medium to high, Good hot tear resistance, low fuel permeability	Very Complicated shape rubber parts
HT 601A	55	1.89	70	15.5	240	79	37	-9	1.2%	O					With the mooney ranged from Medium to high, Good processability, low fuel permeability	Sealing parts required low fuel permeability
TL 301A	30	1.8	66	14	230	78	26	-19	4.0%	O			O		improved low temperature flexibility, Good processability, Low compression set	General purpose, O-rings and gaskets, extruded profiles
<b>Perfluoroelastomer Raw Material, heat resistance up to 315°C, around 6000 fluids and chemical resistance</b>																
FF8025	60	2.05	72.7	24	210	75	24	1	-	O					Peroxide curable system, Outstanding resistance to the widest range of media,	O-rings, gaskets, moulded parts
FF4023	35	2.06	72.5	20	220	73	20	1	-	O			O		Peroxide curable system, Outstanding resistance to the widest range of media,	O-rings, gaskets, moulded parts
FF4030	75	2.05	72.5	20	210	72	20	1	-	O					Peroxide curable system, Outstanding resistance to the widest range of media, heat resistance up to 300°C	O-rings, gaskets, moulded parts
FF8031	60	2.03	71	17	180	73	17	-1	-	O					Triazine Curable system, Outstanding heat resistance up to 315°C	O-rings, gaskets, moulded parts

Note: 1. Properties of the vulcanizates depend on formulation, including curative system and fillers (types & ratio), as well as the curing conditions.

2. Typical data not for specification purpose.

This guide is an overview of the commonly used grades of FLUOTECH.

FLUOTECH keeps continuous improvement and development of new grades for customer's uses.