



FSE Fluoroelastomer Precompound Selection Guide

Grade	Polymer properties									Process						Description	Typical Use
	Nominal Viscosity ML (1+10) @ 121℃	Specific Gravity g/cm ³	Fluorine Content F%	Vol. Change Fuel C / 70h@23℃	Tr10 ℃	Tensile (MPa)	Elong (%)	Duro (Shore A pts)	Compression Set, % 70h @ 200℃	Compression	Transfer	Injection	Extrusion	Calendering	Bonding		
BDF Series: Miscellaneous applications with the balanced properties between the performance and the processing properties.																	
BDF201P	20	1.81	66	4%	-17	11	200	78	16		O	O	O			Excellent mold flow,improve mold release and good compression set	O-rings, gaskets, moulded parts
BDF275P	20	1.81	66	4%	-17	11	245	76	22			O	O			Exellent injection behavior, good scorch safty and lack of mould fouling	O-rings, gaskets, moulded parts, and complicated geometries
BDF25P	25	1.81	66	4%	-17	13	260	74	21	O	O	O	O			Excellent mold flow, improve hot tear strength	O-rings, gaskets, moulded parts, and complicated geometries
BDF25EP	25	1.81	66	4%	-17	13	220	77	20				O			Excellent extrusion behavior,low die swelling	Extruded hoses / profiles
BDF25IP	25	1.81	66	4%	-17	13	200	78	18		O	O				Exellent injection behavior, good scorch safty and lack of mould fouling,low compression set	O-rings, gaskets, moulded parts
BDF25CP	25	1.81	66	4%	-17	13	180	78	17	O	O	O	O			Fast cure grade, Excellent mold flow and lack of mould fouling	O-rings, gaskets, moulded parts
BDF30V	30	2.03	66	4%	-17	13.5	210	73	33	O		O	O			Good resistance to hot acidic gases condensates	Extruded hoses, moulded parts
BDF30P	30	1.81	66	4%	-17	13.5	230	78	18	O	O		O			Excellent flow, excellent mold release and good compression set	O-rings, gaskets, moulded parts, and complicated geometries
BDF302A	30	1.81	66	4%	-17	13.2	270	77	35						O	With adhesive promoter incorporated, it can be applied by conventional technology for coating	Coating for cylinder gaskets, etc.
BDF331P	30	1.81	66	4%	-17	13.5	280	76	23	O	O	O	O	O		High Elongation grade, good mold flow and hot tear strength	General purpose, O-ring, gaskets and complicated geometries
BDF361P	30	1.81	66	4%	-17	13.5	230	77	20	O	O	O	O		O	Excellent mold flow, hot tear resistance,improve bonding adhesion	Oil seals, shaft seals and complicated geometries
BDF362P	30	1.81	66	4%	-17	13.6	230	76	20	O	O	O	O		O	A modified version of BDF361P specially for electronic application	Oil seals, shaft seals and complicated geometries
BDF401P	40	1.81	66	4%	-17	15	190	78	15	O	O		O	O		Excellent processability and very low compression set	O-rings, gaskets
BDF403K	40	1.81	66	4%	-17	17	180	78	12	O	O		O	O		Excellent extrudability while preforming, excellent mechanical properties and compression set	O-rings, gaskets, extruded profles
BDF40XP	40	1.81	66	4%	-17	15.7	240	73	16	O	O			O	O	Improved scorch resistance at high molding temperatures, excellent mold release	complicated geometries, bonded shaft seals and other moulded parts
BDF60C	43	1.81	66	4%	-17	14	210	78	18	O			O	O		Excellent compression molding behavior, low compression set	General purpose, O-rings, gaskets and moulded parts
BDF45P	45	1.81	66	4%	-17	14.5	270	74	20	O	O		O			Higher viscosity version of BDF25P	O-rings, gaskets, moulded parts, and complicated geometries
BDF601P	60	1.81	66	4%	-17	15	180	78	13	O						Higher viscosity version of BDF401P, optimum resistance to compression set	O-rings and gaskets
BDF631P	60	1.80	66	4%	-17	15.8	260	76	19	O					O	Excellent mold release, hot tear and improved metal bonding properties	Small size oil seals and other sealing parts requiring good metal bonding
BDF901P	90	1.81	66	4%	-17	18	200	77	11	O						Very high viscosity grade, best heat resistance among all the BDF grades	O-rings and gaskets that high temperature resistance is required for
BDT Series: Better resistance to heat & chemicals, as well as good resistance to compression set.																	
BDT201P	20	1.85	68	3%	-13	12.5	240	79	28		O	O	O			Good flowability, mold release and improved fluid resistance than copolymers	O-rings, gaskets
BDT235P	25	1.85	68	3%	-13	12.5	280	79	31	O	O	O	O		O	Low viscosity version of BDT435P, excellent mold flow, hot tear resistance,improve bonding adhesion	Multi-purpose, oil seals, shaft seals, complicated geometries
BDT351P	35	1.85	68	3%	-13	14	250	79	31	O	O	O	O		O	Low viscosity version of BDT651P, good hot tear resistance, mould flow and metal bonding properties	Multi-purpose, oil seals, shaft seals, complicated geometries
BDT40CP	40	1.85	68	3%	-13	14	230	79	28	O	O					Excellent mold flow,improve mold release and good compression set	O-rings, gaskets
BDT40P	40	1.85	68	3%	-13	13	250	77	30	O	O		O	O		Excellent mold flow,improve mold release and good compression set	General purpose, O-rings and gaskets, moulded parts
BDT435P	45	1.85	68	3%	-13	14	260	78	31	O	O		O		O	Excellent mold flow, hot tear resistance,improve bonding adhesion	Multi-purpose, oil seals, shaft seals, complicated geometries
BDT601P	60	1.85	68	3%	-13	14	220	78	28	O	O		O			Excellent balance of resistance to compression set and fluids	O-rings, gaskets
BDT651P	60	1.85	68	3%	-13	13.6	270	77	31	O				O	O	Good hot tear resistance, mould flow and metal bonding properties	Multi-purpose, oil seals, shaft seals, complicated geometries
BDT246-1EP	23	1.86	69	2%	-12	13	270	78	34				O		O	Good processability,metal bonding properties and superior fluid resistance	Extruded hoses,oil seals and complicated geometries
BDT246-2CP	46	1.86	69	2%	-12	13	230	78	29	O	O		O	O		Excellent mold flow,improve mold release and very good chemical resistance	General purpose, O-rings and gaskets, moulded parts
BDHT401IP	39	1.90	70	2%	-7	14.5	225	83	35		O	O	O			good flowability, mold release and improved fluid resistance than standard terpolymers	O-rings, gaskets
BDT501HP	53	1.89	70	2%	-7	15	240	80	32	O	O		O			Good mold flow, superior fluid resistance better than standard FKM terpolymers	O-rings, gaskets.
BDTL256P	25	1.80	66	4%	-20	15.5	215	77	21		O	O	O			Good flowability and superior low temperature flexibility than standard terpolymers	General purpose, O-rings and gaskets, extruded profiles
BDTL506P	40	1.80	66	4%	-20	16.5	215	76	19	O	O		O	O		Superior low temperature flexibility than standard terpolymers	General purpose, O-rings and gaskets, extruded profiles

Note: Properties of the vulcanizates depend on formulation, including curative system and fillers(types & ratio), as well as the curing conditions.
Typical data not for specification purpose.

This guide is an overview of the commonly used grades of FSE. FSE keeps continuous improvement and development of new grades for customer's uses.