

Fluoroelastomer precompound/Polymer physical properties

Curing Type	Polymer Type	Product	F%	S.G. g/cm ³	Mooney Viscosity ML+10 @ 121°C	Tensile Max	Elongation %	Compression set % after 2000 cycles @ 200°C/72hr	TR10 %	Application	Product features	Recommended Process Method				
												Compression	Transfer	Injection	Extrusion	Calendering
Bisphenol curing precompound	O-ring and gasket grade															
	Copolymer	FD-201C	65.90	1.80	20	12.90	180	16	-17	O-ring or gasket	Low compression set, excellent flow	**	***	***	**	*
	Copolymer	FD-251C	65.90	1.80	25	13.50	200	17	-17	O-ring or gasket	Excellent flow and mold release	**	***	***	**	*
	Copolymer	DTR-5630	65.90	1.80	30	14.90	206	14	-17	O-ring or gasket	Low compression set, excellent processing performance	***	***	***	**	*
	Copolymer	DTR-5639	65.90	1.80	39	15.80	226	13	-17	O-ring or gasket	Low compression set, excellent processing performance	***	*	*	*	**
	Copolymer	DTR-5640K	65.90	1.81	40	16.10	190	13	-17	O-ring or gasket	Low compression set, excellent processing performance	***	*	*	*	**
	Copolymer	FD-451E	65.90	1.81	45	15.00	200	16	-17	O-ring or gasket	Wide molecular weight distribution version of FD-451C	***	*	*	*	**
	Copolymer	FD-551E	65.90	1.81	56	15.30	180	12	-17	O-ring or gasket	Low compression set, excellent flow and mold release	***				*
	Copolymer	FD-601C	65.90	1.81	65	16.20	190	14	-17	O-ring or gasket	High tensile, low compression set, excellent mold release	***				*
	Copolymer	FD-601E	65.90	1.81	65	15.90	210	18	-17	O-ring or gasket	Wide molecular weight distribution version of FD-601C	***				*
	Copolymer	FD-801C	65.90	1.81	80	16.30	202	12	-17	O-ring or gasket	Wide molecular weight distribution version of FD-601C	***				*
	Terpolymer	FD-202F	68.50	1.85	25	13.70	245	27	-14	O-ring or gasket	Excellent flow and mold release, excellent hot and chemical resistance	***	***	***	**	**
	Terpolymer	FD-305F	68.50	1.85	38	14.60	230	25	-14	O-ring or gasket	Excellent flow and mold release, excellent hot and chemical resistance	***	***	***	**	*
	Terpolymer	FD-45NCF	69.00	1.87	47	16.00	180	25	-13	O-ring or gasket	Excellent flow, chemical resistance	***	*	*	*	**
	Terpolymer	FD-605F	68.50	1.85	65	16.50	210	27	-14	O-ring or gasket	High Tensile, excellent flow, mold release, hot and chemical resistance	***				*
	High Fluorine Terpolymer															
	Terpolymer	DTR-9074X	70.00	1.90	40	14.10	208	30	-6	O-ring or gasket	Excellent chemical resistance and heat resistance	**				
	Terpolymer	DTR-9075X	70.00	1.90	50	15.70	170	23	-7	O-ring or gasket	Excellent chemical resistance and heat resistance	**				
	Terpolymer	DTR-9077X	70.00	1.90	40	16.40	257	29	-6	O-ring or gasket	Excellent chemical resistance and heat resistance	**				
	Metal bonding grade															
	Copolymer	FD-202C	65.90	1.80	20	12.50	240	19	-17	Oil seal, O-ring or gasket	Bonding improved and higher elongation version of FD-201C	**	***	***	**	*
	Copolymer	FD-25NC [®]	65.90	1.80	25	14.50	230	18	-17	Oil seal, O-ring or gasket	Calcium free, excellent bonding and flow, low compression set	**	***	***	**	*
	Copolymer	FD-251HE	65.90	1.80	25	14.20	300	32	-17	Oil seal, complicated bonding product	High elongation, excellent hot part tear resistance	**	***	***	**	*
	Copolymer	FD-331C	65.90	1.80	35	14.50	240	22	-17	Oil seal, complicated bonding product	Excellent flow, mold release and hot part tear resistance	***	**	**	*	*
	Copolymer	FD-351G	65.90	1.80	35	13.80	270	27	-17	Oil seal, complicated bonding product	High elongation, and excellent hot part tear resistance	***	**	**	*	*
	Copolymer	FD-40NC [®]	65.90	1.81	42	14.30	230	18	-17	Oil seal, O-ring or gasket	Calcium free, excellent bonding and flow, low compression set	***	*	*	*	**
	Copolymer	FD-451X	65.90	1.81	45	14.30	280	20	-17	Oil seal, complicated bonding product	Excellent flow, bonding and hot part tear resistance	***	*	*	*	**
	Copolymer	FD-601HE	65.90	1.81	65	15.50	320	33	-17	Oil seal, complicated bonding or thick product	High elongation and excellent hot part tear resistance	***	**	**	**	*
	Terpolymer	FD-205F	68.50	1.85	25	14.60	260	27	-14	General compression molding product	Excellent flow, hot and chemical resistance	***	***	***	**	*
	Terpolymer	FD-45NPI	68.50	1.85	45	15.30	190	23	-14	General compression molding product	Excellent flow, mold release	***	*	*	*	**
	Terpolymer	FD-461T [®]	68.50	1.85	40	14.60	280	33	-14	Oil seal, complicated bonding product	Calcium free, excellent bonding and hot part tear resistance	***	*	*	*	**
	Low temperature															
	Terpolymer	DTR-8051AL	65.90	1.80	55	17.50	180	16	-21	General compression molding product	Excellent low temperature resistance, high tensile	***	*	*	*	*
	Terpolymer	DTR-8041AL	65.90	1.80	41	16.20	190	20	-20	General compression molding product	Excellent low temperature resistance, high tensile	***	*	*	*	*
	Terpolymer	DTR-8021AL	65.90	1.80	27	15.60	200	20	-20	Extrusion and molding product	Excellent low temperature resistance, high tensile, easy flow	***	**	**	*	*
	Fuel line hose															
	Copolymer	FD-255G [®]	65.90	1.80	25	12.90	300	18	-17	fuel line hose	Excellent extrusion performance					***
	Terpolymer	DTR-5915	69.00	1.83	13	12.70	310	22	-12	Low permeability fuel line hose	Bimodal special termination, excellent extrusion, fuel resistance					***
	Terpolymer	DTR-5915TV	69.00	1.83	15	10.30	290	23	-12	Low permeability fuel line hose bonded with THV	Bimodal special termination, excellent extrusion, fuel resistance					***
	Terpolymer	DTR-5915E	69.00	1.87	15	11.00	280	21	-13	Low permeability fuel line hose	Iodine free grade, excellent extrusion, fuel resistance					***
	Terpolymer	DTR-5925E	69.00	1.87	25	13.00	282	20	-13	Low permeability fuel line hose	Iodine free grade, excellent extrusion, fuel resistance					***
	Terpolymer	DTR-5925G	69.00	1.87	25	13.90	330	21	-12	Low permeability fuel line hose	Bimodal special termination, excellent extrusion, fuel resistance					***
	General Use															
	Copolymer	DTR-7640X	66.00	1.81	40	18.15	394	20	-17	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	*	*	*	*
	Terpolymer	DTR-7730	67.50	1.83	30	22.40	283	26	-14	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	**	*	*	*
	Terpolymer	DTR-7820	68.50	1.85	27	19.50	220	35	-13	Extrusion and molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	**	**	**	**
	Terpolymer	DTR-7840	68.50	1.85	40	18.34	280	33	-13	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	*	*	*	*
	Terpolymer	DTR-7840S	67.00	1.83	40	20.30	280	26	-16	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	*	*	*	**
	Terpolymer	DTR-7920S	70.00	1.90	20	21.30	210	22	-7	Extrusion and molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	**	**	**	**
	Terpolymer	DTR-7940S	70.00	1.90	40	22.50	220	22	-7	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	*	*	**	**
Terpolymer	DTR-7945	70.00	1.90	45	17.20	240	28	-7	General compression molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	*	*	*	**	
Terpolymer	DTR-9705S	70.00	1.90	25	23.50	245	19	-5	Extrusion and molding product	Easy flow, excellent resistance to acid, alkali, ATF oil and fuel	**	**	**	**	**	
Turbocharger hose, EGR hose																
Copolymer	DTR-7604	66.00	1.80	20	16.10	270	32	-17	Turbocharger hose for winding and extrusion	Excellent compound bonding with silicone rubber, excellent resistance to organic acids					***	
Terpolymer	DTR-7804	68.50	1.83	20	17.70	230	35	-13	Turbocharger hose for extrusion	Excellent compound bonding with silicone rubber, excellent resistance to organic acids					***	
Low temperature																
Terpolymer	DTR-7620GAL	65.90	1.81	24	191.00	231	26	-22	General compression molding product	Excellent resistance to low temperature acid, alkali and ATF oil	**	**	**	**	**	
Terpolymer	DTR-7650GAL	65.90	1.82	50	19.30	240	26	-22	General compression molding product	Excellent resistance to low temperature acid, alkali and ATF oil	**	**	**	**	**	
Terpolymer	DTR-7530GL	64.00	1.79	30	18.40	255	22	-30	General compression molding product	Excellent resistance to low temperature acid and steam	**	**	**	**	**	
Terpolymer	DTR-7550GL	64.00	1.79	60	17.50	240	20	-30	General compression molding product	Excellent resistance to low temperature acid and steam	**	**	**	**	**	
Smart wear																
Terpolymer	DTR-7720L	67.00	1.83	23	19.70	558	25	-16	Smart watch strap, band	Excellent handfeel and skin affinity, excellent colorability, excellent bonding with handfeel oil	**	**	***			
Terpolymer	DTR-7820P	68.00	1.85	20	18.50	280	27	-15	Smart watch strap, band		**	**	***			
Terpolymer	DTR-7830L	68.50	1.86	30	20.30	380	25	-14	Smart watch strap, band		**	**	***			
Terpolymer	DTR-6720L	67.00	1.83	20	19.80	480	28	-16	Smart watch strap, band		**	**	***			
Copolymer	DTR-6620P	66.00	1.81	23	18.30	245	24	-18	Smart watch strap, band		**	**	***			

Bisphenol Test compound formula

Precompound	100
N990	30
MgO	3
Ca(OH) ₂	6

Press cure: 180 °C @ 5min.
Post cure: 230 °C @ 24hour

® formula and test condition

Precompound	100
N990	30
MgO	9

Press cure: 180 °C @ 5min.
Post cure: 250 °C @ 4hour

™ fuel line hose formula and test condition

Precompound	100
N990	12
MgO	3
Ca(OH) ₂	6
WFA No. 2	0.5
Alflax 25	1

Press cure: 165 °C @ 45min
Post cure: 150 °C @ 4hour
Compression set test: 125 °C @ 70hr

peroxide formula and test condition

Precompound	100
N990	30
ZnO	5
Ca(OH) ₂	6
TAC	4
HT-290	0.5

General curing condition:
Press cure: 180 °C @ 5min.
Post cure: 230 °C @ 4hour

* Suitable
** Very suitable
*** Strongly recommended

Smart wear curing condition:
Press cure: 180 °C @ 5min
Post cure: 180 °C @ 2hour
Compression set test: 100 °C @ 70hr