

# FLUONOX<sup>®</sup>

Fluoroelastomers  
Quick Selection Guide

Grade	Fluorine Content (%)	TR 10 (°C/F)	Mooney Viscosity, ML (1+10) @ 121°C (250 F)	Hardness (Shore A)	Tensile Strength* MPa (psi)	Elongation at Break* (%)	Compression Set* (%)	Product Description	Product suggested uses/applications
	Internal NMR	ASTM D 1329	ASTM D 1646	ASTM D 2240	ASTM D 412C		ASTM D 395 Method B		

### Cure Incorporated Copolymers

KB 2250Z	66.0	-18 (-0.4)	25	74	14.2 (2060)	240	25	Excellent mold flow, tear resistance, bonding to metal	Injection molding of complex shapes - Metal bonding
KB 2252	66.0	-18 (-0.4)	25	73	13.4 (1944)	260	18	Excellent mold flow, high elongation/tear resistance	Injection molding of complex shapes, extruded shapes
KB 2253	66.0	-18 (-0.4)	25	76	14.0 (2031)	200	17	Fast cure rate, excellent mold release	Injection molding, O-rings, gaskets
KB 2255	66.0	-18 (-0.4)	25	75	13.5 (1958)	180	16	Faster cure rate than KB 2253, outstanding Cset	Injection molding, O-rings, gaskets
KB 2400Z	66.0	-18 (-0.4)	40	75	13.2 (1914)	250	25	Fast cure rate, excellent mold release	Compression, injection molding of metal-bonded parts
KB 2402	66.0	-18 (-0.4)	40	74	14.4 (2089)	250	18	Excellent mold flow, tear resistance, bonding to metal	Compression, injection molding of complex shapes
KB 2403	66.0	-18 (-0.4)	40	77	14.0 (2031)	190	17	Excellent resistance to compression set	Compression, transfer, or injection molding of O-rings
KB 2450Z	66.0	-18 (-0.4)	45	74	14.1 (2045)	250	25	Excellent mold flow, tear resistance, bonding to metal	Compression, injection molding of metal bonded parts
KB 2452	66.0	-18 (-0.4)	45	74	14.3 (2074)	250	17	Excellent mold flow, tear resistance, bonding to metal	Compression, injection molding of complex shapes
KB 2453	66.0	-18 (-0.4)	45	77	14.8 (2147)	190	15	Excellent resistance to compression set	Compression, transfer, or injection molding of O-rings

### Bisphenol/Diamine Curable Terpolymers Raw Gums

KR 325	68.0	-14 (7)	25	74	12.6 (1827)	195	22	Low viscosity Terpolymer with excellent process ability and improved chemical resistance vs copolymers	General purpose
KR 370	68.0	-14 (7)	70	76	14.3 (2074)	240	20	High viscosity type of KR 325	Compression molding of oil seals, general purpose
KR 435	68.5	-13 (9)	35	77	12.5 (1813)	200	33	Low viscosity Terpolymer with excellent chemical resistance vs. Copolymers.	Injection molding, coating by solution
KR 470	68.5	-13 (9)	70	76	14.0 (2031)	205	31	High viscosity type of KR 435	Compression molding of oil seals, general purpose

### Cure Incorporated Terpolymers

KB 4300Z	68.5	-13 (9)	30	74	13.5 (1958)	245	33	Low viscosity 68.5% Terpolymer	Injection molding, metal bonding and complex shapes
KB 4303	68.5	-13 (9)	30	76	12.5 (1813)	190	28	Low viscosity 68.5% Terpolymer	Injection molding, O-rings, gaskets
KB 4600Z	68.5	-13 (9)	60	73	12.5 (1813)	250	30	Medium viscosity 68.5% Terpolymer	Compression molding, metal bonding and complex shapes
KB 4603	68.5	-13 (9)	60	75	13.5 (1958)	195	23	Medium viscosity 68.5% Terpolymer	Compression, transfer, or injection molding of O-rings

### Low Temperature Terpolymers

KR 630	66.0	-19 (-2)	30	75	13.5 (1958)	175	19	Low viscosity Terpolymer with -19°C TR 10 - Raw gum	Injection molding - General purpose
KB 6253	66.0	-19 (-2)	25	76	14.0 (2031)	175	18	Low viscosity Terpolymer with -19°C TR 10 - Cure incorporated	Injection molding of O-rings

### Peroxide Curable Terpolymers

KR 320P	67.0	-15 (5)	20	70	19.4 (2814)	250	23	Low viscosity, outstanding relaxation behaviour	Injection molding - General purpose
KR 340P	67.0	-15 (5)	45	70	19.3 (2799)	280	25	Medium viscosity, outstanding relaxation behaviour	Compression molding - General purpose
KR 520P	70.0	-5 (23)	20	76	20.5 (2973)	210	21	Low viscosity high in %F, best in class for chemical resistance	Injection molding - General purpose
KR 545P	70.0	-5 (23)	45	72	21.2 (3075)	210	24	Medium viscosity high in %F, best in class for chemical resistance	Compression molding - General purpose

\* Press cure condition: 10 min at 170°C (338 F), Post cure conditions: (8+16) hours at 230°C (446 F)

### Test compounds:

Using Bisphenol Curable Raw Gum	Remarks	Using bisphenol cure incorporated Copolymers/Terpolymers	Remarks	Using peroxide curable Terpolymer raw gum	Remarks
Raw Polymer	100	Precompound	100	Peroxide curable raw gum	100
Bisphenol AF	2 phr >99.5% pure	N-990 carbon black	30 phr Thermax N-990	N-990 carbon black	30 phr Thermax N-990
Benzy TriPheny Phosphonium Chloride	0.5 phr >99.5% pure	Magnesium oxide	3 phr Kyowamag 1 50	Luperox 101XL45	3 phr Arkema
N-990 carbon black	30 phr Thermax N-990	Calcium hydroxide	6 phr OMM-2	TAIC (100%)	3 phr >99.0% pure
Magnesium oxide	3 phr Kyowamag 1 50			Zinc Oxide (ZnO)	5 phr >99.0% pure
Calcium hydroxide	6 phr OMM-2				



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