

Material Property Data Sheet

V700-75



V700-75 Fluoroelastomer (FKM)

Boyd Fluorocarbon (FKM) materials utilize the best ingredient formulations from leading industry suppliers including Chemours (Viton®), Solvay, and Daikin. V700-75 has a temperature range of -10F to +480F and can withstand exposure to +600F for brief periods of time. The relatively high level of fluorine allows for exceptional resistance to weather, compression set and chemical attack over wide variety of fluids.

ASTM D2000 Designation	Physical Properties	Requirements	Typical Results
HK	Original Properties		
Z1	Durometer, Shore A, D2240, pts	75+/-5	75
	Tensile, D412, MPa (psi), Minimum	10 (1450)	14.4 (2088)
	Elongation, D412, % Minimum	150	182
	Specific Gravity, g/cm ³	-	1.87
	Color	-	Black
A1-10	Heat Resistance, D573, 70 hrs @ 250°C		
	Durometer Change, Points	+10	+4
	Tensile Strength Change, % Maximum	-25	-8
	Elongation Change, % Maximum	-25	-12
B37	Compression Set, Method B, 22 hrs @ 175°C		
	Deflection, % Maximum	50	11
B38	Compression Set, Method B, 22 hrs @ 200°C		
	Deflection, % Maximum	15	13
C12	Resistance to Ozone, Method D1171		
	Method B	No Cracks	Pass
C20	Resistance to Outdoor Aging, Method D1171		
	Method B	No Cracks	Pass
EF31	Fuel C Resistance, 70 hrs @ 23°C		
	Durometer Change, Points	+/-5	-4
	Tensile Change, % Maximum	-25	-15
	Elongation Change, % Maximum	-20	-17
	Volume Change, %	+10 / -0	+5

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ASTM D2000 Designation	Physical Properties	Requirements	Typical Results
EO78	Fluid Resistance, D471, Fluid No. 101, 70 hrs @ 200°C		
	Durometer Change, Points	+5 / -15	-7
	Tensile Change, % Maximum	-40	-3
	Elongation Change, % Maximum	-20	+5
	Volume Change, %	+15 / -0	+14
EO88	Fluid Resistance, D471, Mobile Jet II, 70 hrs @ 200°C		
	Durometer Change, Points	+5 / -15	-9
	Tensile Change, % Maximum	-40	-23
	Elongation Change, % Maximum	-20	-18
	Volume Change, %	+25	+20
	Fluid Resistance, D471, IRM 903 Oil, 70 hrs @ 150°C		
	Volume Change, %	+10	+3
Z2	Low Temperature Retraction TR10, Degrees °C	-15	-18.3

Specifications Met

ASTM D2000 M6HK 810 A1-10 B38 C12 C20 EF31 EO88

ASTM D2000 M2HK 810 A1-10 B37 B38 C12 C20 EF31 EO78

REACH SVHC 235

RoHS 2015/863

California Proposition 65*

Dodd-Frank Consumer Protection Act: No conflict materials (Tantalum, Tin, Tungsten & Gold)

*This compound may contain trace amounts of these impurities included in California Prop 65:

Benz[a]anthracene 56-55-3

Benzo[b]fluoranthene 205-99-2

Benzo[j]fluoranthene 205-82-3

Benzo[k]fluoranthene 207-08-9

Benzo[a]pyrene 50-32-8

Chrysene 218-01-9

Dibenz[a,h]anthracene 53-70-3

Naphthalene 91-20-3

Indeno[1,2,3-cd]pyrene 193-39-5

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