



MATERIAL PROPERTY DATA SHEET
V700-75 BLACK FLUOROELASTOMER (FKM)

GENERAL PROPERTIES

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.

<u>ASTM</u> <u>D2000</u>	<u>PHYSICAL PROPERTIES</u>	<u>REQUIREMENTS</u>	<u>TYPICAL</u> <u>RESULTS</u>
HK	<u>ORIGINAL PROPERTIES</u>		
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	<u>HEAT AGE, D573, 70 HRS @ 250°C</u>		
	Durometer Change, Points	+10	+4
	Tensile Strength Change, % Maximum	-25	-8
	Elongation Change, % Maximum	-25	-12
B37	<u>COMPRESSION SET, METHOD B, 22 HRS @ 175°C</u>		
	Deflection, % Maximum	50	11
B38	<u>COMPRESSION SET, METHOD B, 22 HRS @ 200°C</u>		
	Deflection, % Maximum	15	13
C12	<u>RESISTANCE TO OZONE, METHOD D1171</u>		
	Method B	No Cracks	Pass
C20	<u>RESISTANCE TO OUTDOOR AGING, D1171</u>		
	Quality retention rating, % Minimum	No Cracks	Pass
EF31	<u>FUEL C RESISTANCE, 70 HRS @ 23°C</u>		
	Durometer Change, Points	+/-5	-4
	Tensile Change, % Maximum	-25	-15
	Elongation Change, % Maximum	-20	-17
	Volume Change, %	+10	+5
EO78	<u>FLUID RESISTANCE, D471, FLUID NO. 101, 70 HRS @ 200°C</u>		
	Durometer Change, Points	+5 / -15	-7
	Tensile Change, % Maximum	-40	-3
	Elongation Change, % Maximum	-20	+5
	Volume Change, %	+15	+14
EO88	<u>FLUID RESISTANCE, D471, HATCO 7700, 70 HRS @ 200°C</u>		
	Durometer Change, Points	+5 / -15	-9
	Tensile Change, % Maximum	-40	-23
	Elongation Change, % Maximum	-20	-18
	Volume Change, %	+25	+20



MATERIAL PROPERTY DATA SHEET
V700-75 BLACK FLUOROELASTOMER (FKM)

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 209

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