

Material Property Data Sheet

N168-70



N168-70 Sulfur Cured NBR

N168-70 is Boyd's food grade Nitrile meeting FDA 21 CFR 177.2600 requirements. This compound has a relatively high ACN content, making it exceptionally resistant to aggressive liquids and foods over a temperature range of -40F to +250F. N168-70 also demonstrates excellent tensile strength and abrasion resistance.

ASTM D2000 Designation	Physical Properties	Requirements	Typical Results
BG	Original Properties		
	Durometer, Shore A, D2240, pts	70+/-5	68
	Tensile, D412, MPa (psi), Minimum	14 (2031)	14.6 (2118)
	Elongation, D412, % Minimum	250	410
	Specific Gravity, g/cm ³	-	1.23
	Color	-	Black
A14	Heat Resistance, D573, 70 hrs @ 100°C		
	Durometer Change, Points	+/- 5	+5
	Tensile Strength Change, % Maximum	± 15	+2
	Elongation Change, % Maximum	-15	-9
B14	Compression Set, D395, 22 hrs @ 100°C (Solid Button)		
	Deflection, % Maximum	25	11
EA14	Water Resistance, 70 hrs @ 100°C		
	Durometer Change, Points	+/-10	-3
	Volume Change, %	+/-15	+2
EF11	Fuel A Resistance, 70 hrs @ 23°C		
	Durometer Change, Points	+/-10	-2
	Tensile Change, % Maximum	-25	-17
	Elongation Change, % Maximum	-25	+3
	Volume Change, %	+10 / -5	+2

NOTICE: The information included in this data sheet is believed to be accurate and reliable. Boyd assumes no responsibility for end use applications and no performance warranty is expressed or implied.



N168-70 Sulfur Cured NBR

ASTM D2000 Designation	Physical Properties	Requirements	Typical Results
EF21	Fuel B Resistance, 70 hrs @ 23°C		
	Durometer Change, Points	-30	-17
	Tensile Change, % Maximum	-60	-28
	Elongation Change, % Maximum	-60	-9
	Volume Change, % Maximum	+40	+21
EO14	Fluid Resistance, D471, IRM 901 Oil, 70 hrs @ 100°C		
	Durometer Change, Points	+10 / -5	+3
	Tensile Change, % Maximum	-25	-14
	Elongation Change, % Maximum	-45	-7
	Volume Change, %	+5 / -10	-8
EO34	Fluid Resistance, D471, IRM 903 Oil, 70 hrs @ 100°C		
	Durometer Change, Points	+5 / -10	-2
	Tensile Change, % Maximum	-45	-22
	Elongation Change, % Maximum	-45	-14
	Volume Change, %	+35	+5
Z1	Low Temperature Retraction		
	TR10, Degrees °C, Maximum	-32	-33

Specifications Met

ASTM D2000 M2BG 714 B14 EA14 EF11 EF21 EO14 EO34 Z1=TR10

ASTM D2000 M5BG 714 A14 B14 EA14 EO14 EO34

REACH SVHC 235

RoHS 2015/863

California Proposition 65*

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

FDA 21 CFR 177.2600 (not for use with milk & edible oils)

*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

NOTICE: The information included in this data sheet is believed to be accurate and reliable. Boyd assumes no responsibility for end use applications and no performance warranty is expressed or implied.