



Material Datasheet

Compound #: N70

Nitrile (Buna), General Purpose

Material Summary

Material Type:	NBR
Durometer:	70
Color:	Black
Special Properties:	
Recommended Temperature Range (Static):	-35°C to 248°C
Specification:	ASTM D2000 M2BG714 A14 B14 EA14 EF11 EF21 EO14 EO34

Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-15 ^{e1})	70±5	87
Tensile Strength, psi(MPa) (ASTM D412-16)	2030(14)(min)	2393(16.5)
Elongation, (%) (ASTM D412-16)	250(min)	263
Modulus at 100%, psi(MPa) (ASTM D412-16)		852(5.87)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.25
(A14) Heat age, 70 Hrs @ 100 °C (ASTM D573-04)		
Hardness Change, pts.	±15	+4
Tensile Strength Change, %	±30	+12
Elongation Change, %	-50(max)	-17
(B14) Compression set, 22 Hrs @ 100 °C (ASTM D395-18B)		
-	25%(button)(max)	12
(EA14) Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16a)		
Hardness Change, pts.	±10	-3
Volume Change, %	±15	+6
(EF11) ASTM Fuel A Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)		
Hardness Change, pts.	'±10	-4
Tensile Change, %	-25(max)	-12
Elongation Change, %	-25(max)	-15
Volume Change, %	-5~+10	+5
(EF21) ASTM Fuel B Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)		
Hardness Change, pts.	-30~0	-13
Tensile Change, %	-60(max)	-26
Elongation Change, %	-60(max)	-31
Volume Change, %	0~+40	+23.6



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(EO14) IRM 901 Oil, 70 Hrs @ 100 °C (ASTM D471-16a)

Hardness Change, pts.	-5~+10	+8
Tensile Strength Change, %	-25(max)	+11
Elongation Change, %	-45(max)	-17
Volume Change, %	-10~+5	-9.6

(EO34) IRM 903 Oil, 70 Hrs @ 100 °C (ASTM D471-16a)

Hardness Change, pts.	-10~5	-6
Tensile Strength Change, %	-45(max)	+5
Elongation Change, %	-45(max)	-20
Volume Change, %	0~+25	+12

*American Society for Testing and Materials

Report Date: 8/12/2020

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