

Material Datasheet

Compound #: N70118

Nitrile (Buna), NSF 61, FDA

Material Summary

Material Type:	Nitrile (Buna)
Durometer:	70
Color:	Black
Special Properties:	NSF 61 Certified, FDA 21 CFR Compliant
Recommended Temperature Range (Static):	-40°C to 100°C
Cure System:	Sulfur
Specification:	ASTM D2000 M2BG714 A14 B14 EA14 EF11 EF21 EO14 EO34 Z1 Z2 Z3

Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-15)	70±5	72
Tensile Strength, psi(MPa) (ASTM D412-16)	2031(14)(min)	2565(17.69)
Elongation, (%) (ASTM D412-16)	250(min)	264
Modulus at 100%, psi(MPa) (ASTM D412-16)		879 (6.06)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.26
A14 Heat age, 70 Hrs @ 100 °C (ASTM D573-04)		
Hardness Change, pts, Shore A	±15	+5
Tensile Strength Change, %	±30	+10
Elongation Change, %	-50(max)	-18
Weight Change, %		-0.8
B14 Compression set, 22 Hrs @ 100 °C (ASTM D395-18, Method B)		
-	25%(button)(max)	9.6
EA14 Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16a)		
Hardness Change, pts, Shore A	±10	-4
Tensile Strength Change, %		+5
Elongation Change, %		-15
Volume Change, %	±15	+5.2
EF11 ASTM Fuel A Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)		
Hardness Change, pts, Shore A	±10	-3
Tensile Strength Change, %	-25(max)	-10
Elongation Change, %	-25(max)	-12
Volume Change, %	-5~+10	+2.3

Material Datasheet

Compound #: N70118

Nitrile (Buna), NSF 61, FDA

EF21 ASTM Fuel B Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)

Hardness Change, pts, Shore A	-30~0	-20
Tensile Strength Change, %	-60(max)	-25
Elongation Change, %	-60(max)	-31
Volume Change, %	0~+40	+22.1

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

Hardness Change, pts, Shore A	-5~+10	+8
Tensile Strength Change, %	-25(max)	+7
Elongation Change, %	-45(max)	-20
Volume Change, %	-10~+5	-8.8

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

Hardness Change, pts, Shore A	-10~+5	-4
Tensile Strength Change, %	-45(max)	+12
Elongation Change, %	-45(max)	-20
Volume Change, %	0~+25	+4.2

*American Society for Testing and Materials

Report Date: 1/8/2020

Information within this report is believed to be accurate and reliable. However, Global O-Ring and Seal makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate prior to use.