

Material Datasheet

Compound #: N70-C401

Nitrile (Buna), Metal Detectable, FDA

Material Summary		
Material Type:	NBR	
Durometer:	70	
Color:	Blue	
Special Properties:	Metal Detectable, FDA Compliant	
Recommended Temperature Range (Static):	-40°C (-40°F) to 100°C (212°F)	
Meets Specification:	ASTM D2000 M2BG707 B14 EA14 EF11 EF21 EO14 EO34 Z	
Original Properties	Requirements	Typical Results
Hardness, Shore A (Type M), D2240-15	70±5	67
Tensile Strength, min, Mpa, D412-16	7	9.0
Elongation, min, %, D412-16	200	520
Specific Gravity (S.G), D297-21	Report	1.49
(Basic) Heat age, 70 Hrs @ 100 °C (ASTM D573-04(19))	Requirements	Typical Results
Hardness Change, points, max	±15	+2
Tensile Change, max, %	±30	-5
Elongation Change, max, %	-50	-28
(B14) Compression set, 22 Hrs @ 100 °C (ASTM D395-18))	Requirements	Typical Results
-	25 (max, %)	19
(EA14) Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16)	Requirements	Typical Results
Hardness Change, points, max	±10	+3
Volume Change, %	±15	+4
(EF11) Fuel A Resistance, 70hrs at 23°C	Requirements	Typical Results
Hardness Change, pts.	±10	-2
Tensile Strength Change, max, %	-25	-14
Elongation Change, max, %	-25	-15
Volume Change, %	-5 to +10	+1
(EF21) Fuel B Resistance, 70hrs at 23°C (D471-16a)	Requirements	Typical Results
Hardness Change, pts.	-30 to 0	-10
Tensile Strength Change, max, %	-60	-46
Elongation Change, max, %	-60	-54
Volume Change, %	0 to +40	+25

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(EO14) IRM 901 Oil Resistance, 70 hrs at 100°C (D471-16a)		
	Requirements	Typical Results
Hardness Change, pts.	-5 to +10	+3
Tensile Strength Change, max, %	-25	-1
Elongation Change, max, %	-45	-35
Volume Change, %	-10 to +5	-1
(EO34) IRM903 Oil Resistance, 70 hrs at 100°C (D471-16a)		
	Requirements	Typical Results
Hardness Change, pts.	-10 to +5	-3
Tensile Strength Change, max, %	-45	-3
Elongation Change, max, %	-45	-29
Volume Change, %	0 to +25	+9
(Z) TR-10 Retraction at Lower Temperature Resistance		
	Requirements	Typical Results
51 mm die, 50% elongation, -°C	Report	-25.9

Compound Previously Known As: N70312

Report Date: 2/16/2024

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.