

Material Test Report

Compound N70-A101

Nitrile (Buna), Black, General Purpose

Material Summary		
Material Type:	Butadiene Acrylonitrile Copolymer (NBR)	
Durometer:	70	
Color:	Black	
Special Properties:	General Purpose	
Recommended Temperature Range (Static):	-30°C (-22°F) to 121°C (250°F)	
Cure System:	Sulfur	
Meets Specification:	ASTM D2000 M2BG714 A14 B14 EF11 EF21 EO14 EO34	
Original Properties	Requirements	Typical Results
Hardness, Shore A, ASTM D2240-15	70 ± 5	66 to 70
Tensile Strength, psi (MPa), ASTM D412-16	14 min	15.6 to 17.6 MPa
Elongation, %, ASTM D412-16	250 min	288 to 462
Specific Gravity, Mg/m ³ , ASTM D297-15	Report	1.23 to 1.24
HEAT AGE, A14 (70 Hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D573-04	± 15	+3 to +5
Tensile Strength Change, %, ASTM D573-04	± 30	+2 to +14
Elongation Change, %, ASTM D573-04	-50 max	-12 to -13
Weight Change, %, ASTM D573-04		-1.1
COMPRESSION SET, B14 (22 Hrs. @ 100°C)	Requirements	Typical Results
Compression Set, %, ASTM D395-18	25 max	9.0 to 13
FUEL A RESISTANCE, EF11 (70 Hrs. @ 23°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	± 10	-4 to -1
Tensile Strength Change, %, ASTM D471-16a	-25 max	-22 to -7
Elongation Change, %, ASTM D471-16a	-25 max	-8
Volume Change, %, ASTM D471-16a	-5 to +10	+1.1 to +3
FUEL B RESISTANCE, EF21 (70 Hrs. @ 23°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-30 to 0	-13 to -9
Tensile Strength Change, %, ASTM D471-16a	-60 max	-35 to -18
Elongation Change, %, ASTM D471-16a	-60 max	-35 to -21
Volume Change, %, ASTM D471-16a	0 to +40	+12 to +24.0

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IRM 901 OIL RESISTANCE, EO14 (70 Hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-5 to +10	+3 to +8
Tensile Strength Change, %, ASTM D471-16a	-25 max	+4 to +6
Elongation Change, %, ASTM D471-16a	-45 max	-18 to -11
Volume Change, %, ASTM D471-16a	-10 to +5	-9.9 to -4
IRM 903 OIL RESISTANCE, EO34 (70 Hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-10 to +5	-3 to +2
Tensile Strength Change, %, ASTM D471-16a	-45 max	+4 to +5
Elongation Change, %, ASTM D471-16a	-45 max	-20 to -13
Volume Change, %, ASTM D471-16a	0 to +25	+0.1 to +10

Compound Previously Known As: N70101

Report Date: 1/14/2022

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.