

Material Test Report

Compound N70-B103

Nitrile (Buna), UL 157 Approved

Material Summary		
Material Type:	Nitrile (Buna)	
Durometer:	70	
Color:	Black	
Special Properties:	UL 157 Approved	
Recommended Temperature Range (Static):	-40°C (-40°F) to 100°C (212°F)	
Cure System:	Sulfur	
Meets Specification:	ASTM D2000 M2BG708 A14 B14 B34 EA14 EF11 EF21 Z1 Z2	
Original Properties	Requirements	Typical Results
Hardness,(shore A) (ASTM D2240-15 ^{e1})	70±5	72
Tensile Strength,psi(MPa) (ASTM D412-16)	1160(8)(min)	1624(11.20)
Elongation,(%) (ASTM D412-16)	200(min)	298
Modulus at 100%,psi(MPa) (ASTM D412-16)		742(5.12)
Density,(Mg/m ³) (CNS 5341-96,Method A)		1.35
HEAT AGE, A14 (70 hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D573-04	±15	+5
Tensile Strength Change, %, ASTM D573-04	±30	+12
Elongation Change, %, ASTM D573-04	-50(max)	-15
Weight Change, %, ASTM D573-04		-0.6
COMPRESSION SET, B14 (22 hrs. @ 100°C)	Requirements	Typical Results
ASTM D395-18,Method B	25%(button)(max)	10.0
WATER RESISTANCE, EA14 (70 hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	±10	-2
Tensile Strength Change, %, ASTM D471-16a		+13
Elongation Change, %, ASTM D471-16a		-7
Volume Change, %, ASTM D471-16a	±15	+3.5
FUEL A RESISTANCE, EF11 (70 hrs. @ 23°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	±10	+1
Tensile Strength Change, %, ASTM D471-16a	-25(max)	0
Elongation Change, %, ASTM D471-16a	-25(max)	+6
Volume Change, %, ASTM D471-16a	-5~+10	-1.2

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FUEL B RESISTANCE, EF21 (70 hrs. @ 23°C)	Requirements	Typical Results
Hardness Change, pts, Shore A, ASTM D471-16a	-30~0	-12
Tensile Strength Change, %, ASTM D471-16a	-60(max)	-15
Elongation Change, %, ASTM D471-16a	-60(max)	-16
Volume Change, %, ASTM D471-16a	0~+40	+12.4
Low Temp Retraction Test (TR Test), Z1, (ASTM D1329-16)	Requirements	Typical Results
Testing Elongation 50%,	-	-
The Equipment of measure temperature: thermocouple,	-	-
Length of Sample: 51 mm,	-	-
Rate of Temperature increasing: 1°C/min,	-	-
Test Temperature: 26 °C,	-	-
Coolant : Methanol,	-	-
TR10, °C,	-	-27.1

Compound Previously Known As: N70126

Report Date: 2/19/2020

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.