GLOBAL O-RING and SEAL
ALL-AROUND BETTER

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Compound N70101 Data Sheet

Material: Butadiene Acrylonitrile Copolymer
70 Durometer, Black, Commercial Grade

General Information:
Nitrile, Buna, or NBR is one of the most common cost-effective sealing elastomers due to its resistance to petroleum-based fuels and lubricants. NBR has good mechanical properties when compared with other elastomers and high wear resistance. NBR is not resistant to weathering

Cure System: *Sulfur-cured*
Sulfur-cured compounds provide better wear resistance, are more cost effective, provide higher ultimate elongation, and improve the ability to withstand repetitive bending.

Temperature Range: -35°C (-31°F) to 120°C (248°F)

Attributes:
Color: Black
Durometer Shore A: 70±5
Shelf-life: 15 years
Resistant to compression set
Resistant to tear/abrasion

Performs Well In:

- Petroleum based oils & fuels
- Aliphatic hydrocarbons
- Vegetable oils
- Silicone oils & greases
- Ethylene glycol
- Dilute acids
- Water to below 100°C (212°F)

Doesn't Perform Well In:

- Aromatic hydrocarbons
- Automotive brake fluid
- Chlorinated hydrocarbons
- Ketones
- Ethers
- Esters
- Phosphate ester hydraulic fluids
- Strong acids
- Ozone / weathering / sunlight

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TEST REPORT FOR COMPOUND N70101

MATERIAL: BUTADIENE ACRYLONITRILE COPOLYMER

DUROMETER: 70

COLOR: BLACK

ASTM* D2000 M2BG714 A14 B14 EA14 EF11 EF21 EO14 EO34

SECTION OF SPEC.	PROPERTIES	REQUIREMENTS	TYPICAL RESULTS	ASTM TEST METHOD
	ORIGINAL PHYSICAL PROPERTIES			
	Hardness, Shore A	70±5	66	D2240-15
	Tensile Strength, Mpa	14(min)	16.5	D412-16
	Elongation, min, percent	250(min)	263	D412-16
	Modulus @ 100%, psi (Mpa)		852	D412-16
	Density,(Mg/m^3)		1.25	CNS 5341-96A
A14	**HEAT AGE**			D573-04
	70 hours at 100°C			
	Hardness Change, points	±15	+4	
	Tensile Strength Change, percent	±30	+12	
	Elongation Change, percent	-50(max)	-17.0	
B14	**COMPRESSION SET**			D395-18B
	22 hours at 100°C, percent	25%(plied)(max)	12	
EA14	**WATER RESISTANCE**			D471-16a
	70 hours @ 100°C			
	Hardness Change, points	±10	-3	
	Volume Change, percent	±15	+6	
EF11	**ASTM FUEL A RESISTANCE**			D471-16a
	70 hours at 23°C			
	Hardness Change, points	±10	-4	
	Tensile Change, max, percent	-25(max)	-12	
	Elongation Change, max, percent	-25(max)	-15	
	Volume Change, percent	-5~+10	+5	
EF21	**ASTM FUEL B RESISTANCE**			D471-16a
	70 hours at 23°C			
	Hardness Change, points	-30~0	-13	
	Tensile Change, max, percent	-60(max)	-26	
	Elongation Change, max, percent	-60(max)	-31	
	Volume Change, percent	0~+40	+23.6	

EO14	**IRM 901 OIL**			D471-16a
	70 hours at 100°C			
	Hardness Change, points	-5~+10	+8	
	Tensile Change, max, percent	-25(max)	+11	
	Elongation Change, max, percent	-45(max)	-17	
	Volume Change, percent	-10~+5	-9.6	
EO34	**IRM 903 OIL**			D471-16a
	70 hours at 100°C			
	Hardness Change, points	-10~+5	-6	
	Tensile Change, max, percent	-45(max)	+5	
	Elongation Change, max, percent	-45(max)	-20	
	Volume Change, percent	0~+25	+12	

*American Society for Testing and Materials