



Compound

3918**NITRILE BUTADIENE
90 DUROMETER
BLACK - TEFLON FILLED****PRODUCT DATA SHEET**

Compound 3918 is a 90 durometer black colored Buna N elastomer, it is formulated with Teflon to provide internal lubrication. All materials in this compound are FDA approved.

This compound will meet or exceed the specifications listed and has the following physical properties:

ASTM D2000 6 BG 915 A14 B14 B343 EO14 EO34
7 BG 915 B14 EA14 EF11 EF21 EO14 EO34
4 BK 915 A14 B14 EF11 EO14

Original Properties

Modulus @ 100% Elongation	126 psi	0.9 MPa
Tensile Strength	3408 psi	23.5 MPa
Ultimate Elongation	126 %	
Hardness, Shore A	94 Durometer	
Specific Gravity	1.31 grams/cc	
Brittleness Temperature	4 °F	-16 °C
Tear Resistance, Die B	413 ppi	72.3 kN/m
Tear Resistance, Die C	263 ppi	46.1 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	9.2 %
Solid: 22 hrs @ 257°F (125°C)	12.4 %
Solid: 70 hrs @ 212°F (100°C)	13.9 %
Plied: 22 hrs @ 212°F (100°C)	19.9 %
Plied: 22 hrs @ 257°F (125°C)	27.0 %
Plied: 70 hrs @ 212°F (100°C)	27.4 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 3.3 %
Change - Elongation	- 23.0 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 16.6 %
Change - Elongation	- 54.0 %
Change - Hardness, Shore A	+ 2

HEAT AGED: 70 hrs @ 257°F (125°C) Test Tube Method

Change - Tensile Strength	- 16.6 %
Change - Elongation	- 54.0 %
Change - Hardness, Shore A	+ 2



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DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)

Change - Hardness, Shore A - 2
Change - Volume + 4.6 %

ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)

Change - Tensile Strength - 18.3 %
Change - Elongation - 27.0 %
Change - Hardness, Shore A - 1
Change - Volume + 1.1 %

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)

Change - Tensile Strength - 28.3 %
Change - Elongation - 19.0 %
Change - Hardness, Shore A - 9
Change - Volume + 27.5 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength + 2.6 %
Change - Elongation - 9.5 %
Change - Hardness, Shore A 0
Change - Volume - 0.4 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength + 3.4 %
Change - Elongation - 3.2 %
Change - Hardness, Shore A - 2
Change - Volume + 5.9 %