



Compound

3518**NITRILE - BUTADIENE
50 DUROMETER
BLACK - TEFLON FILLED****PRODUCT DATA SHEET**

Compound 3518 is a 50 durometer black colored Buna N elastomer, it is formulated with Teflon to provide internal lubrication.

This compound has the following physical properties:

Original Properties

Modulus @ 100% Elongation	185 psi	1.3 MPa
Tensile Strength	1141 psi	7.9 MPa
Ultimate Elongation	442 %	
Hardness, Shore A	52 Durometer	
Specific Gravity	1.14 grams/cc	
Brittleness Temperature	-59 °F	-51 °C
Tear Resistance, Die B	85 ppi	14.9 kN/m
Tear Resistance, Die C	118 ppi	20.7 kN/m

Compression Set

Solid: 22 hrs @ 158°F (70°C)	13.5 %
Solid: 22 hrs @ 212°F (100°C)	12.8 %
Solid: 22 hrs @ 257°F (125°C)	17.2 %
Solid: 70 hrs @ 212°F (100°C)	18.5 %
Plied: 22 hrs @ 158°F (70°C)	16.8 %
Plied: 22 hrs @ 212°F (100°C)	21.0 %
Plied: 22 hrs @ 257°F (125°C)	30.9 %
Plied: 70 hrs @ 212°F (100°C)	28.9 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 31.1 %
Change - Elongation	- 9.5 %
Change - Hardness, Shore A	+ 12

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 7.4 %
Change - Elongation	- 30.0 %
Change - Hardness, Shore A	+ 13

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

Change - Hardness, Shore A	- 8
Change - Volume	+ 9.6 %

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

Change - Tensile Strength	- 13.2 %
Change - Elongation	+ 1.6 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 5.9 %



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

Change - Tensile Strength	- 54.5 %
Change - Elongation	- 29.2 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 35.9 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 64.1 %
Change - Elongation	- 32.8 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 10.9 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 22.4 %
Change - Elongation	- 16.7 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 13.9 %