



Compound

3618**NITRILE - BUTADIENE
60 DUROMETER
BLACK - TEFLON FILLED****PRODUCT DATA SHEET**

Compound 3618 is a 60 durometer black colored Buna N elastomer, it is formulated with Teflon to provide internal lubrication. It exhibits good physicals and has good resistance to petroleum-based oils.

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

ASTM D2000 2 BF 620 B14 B34 E014 EO34
2 BG 620 B14 B34 EO14 EO34 EF11 EF21 EA14
3 BG 620 B14 EO14
4 BG 620 B14
5 BG 620 A14 B14 B34 EO14 EO34
4 BK 620 B24 B14 B34 EF11 EO14
2 CH 620 A15 B14 B34 EO15 EO35
3 CH 620 A15 B14 B34 EO16 EO36
5 CH 615 B14 B34 F14
6 CH 615 B14 B34 EO36

Original Properties

Modulus @ 100% Elongation	205 psi	1.4 MPa
Tensile Strength	2077 psi	14.3 MPa
Ultimate Elongation	570 %	
Hardness, Shore A	59 Durometer	
Specific Gravity	1.24 grams/cc	
Brittleness Temperature	-27 °F	-33 °C
Tear Resistance, Die B	163 ppi	28.5 kN/m

Compression Set

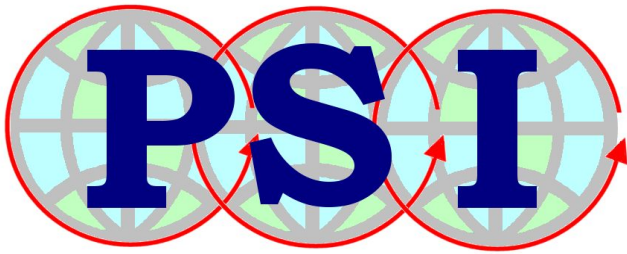
Solid: 22 hrs @ 212°F (100°C)	12.9 %
Solid: 70 hrs @ 212°F (100°C)	17.9 %
Plied: 22 hrs @ 212°F (100°C)	18.9 %
Plied: 70 hrs @ 212°F (100°C)	27.3 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 1.5 %
Change - Elongation	- 15.7 %
Change - Hardness, Shore A	+ 4

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 8.3 %
Change - Elongation	- 43.9 %
Change - Hardness, Shore A	+ 9



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Change - Tensile Strength	- 8.3 %
Change - Elongation	- 43.9 %
Change - Hardness, Shore A	+ 9

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

Change - Hardness, Shore A	- 3
Change - Volume	+ 5.7 %

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

Change - Tensile Strength	- 13.3 %
Change - Elongation	- 8.8 %
Change - Hardness, Shore A	- 3
Change - Volume	- 2.2 %

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

Change - Tensile Strength	- 58.7 %
Change - Elongation	- 47.4 %
Change - Hardness, Shore A	- 19
Change - Volume	+ 29.4 %

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

Change - Tensile Strength	- 71.7 %
Change - Elongation	- 61.4 %
Change - Hardness, Shore A	- 20
Change - Volume	+ 50.2 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

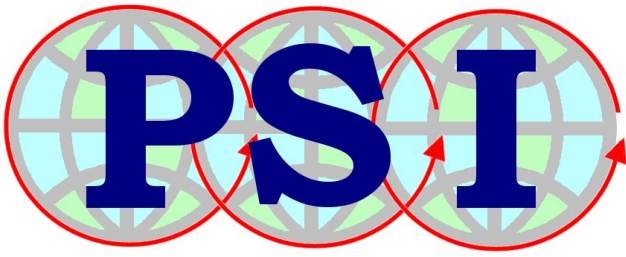
Change - Tensile Strength	+ 4.5 %
Change - Elongation	- 17.5 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 5.8 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 2.6 %
Change - Elongation	- 26.3 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 6.0 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 1.3 %
Change - Elongation	- 31.6 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 6.2 %



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PRODUCT DATA SHEET

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 1.3 %
Change - Elongation	- 10.5 %
Change - Hardness, Shore A	- 5
Change - Volume	- 7.6 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 9.5 %
Change - Elongation	- 17.5 %
Change - Hardness, Shore A	- 4
Change - Volume	- 8.8 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 13.4 %
Change - Elongation	- 21.1 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 9.6 %

Tear Resistance, Method D 624, Die B

Tear Resistance	163.0 ppi
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