



Compound

**3617****NITRILE - BUTADIENE  
60 DUROMETER  
BLACK - MOLY - FILLED****PRODUCT DATA SHEET**

Compound 3617 is a 60 durometer black colored Buna N elastomer. It is formulated with molybdenum disulfide to provide self-lubrication.

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

ASTM D2000 2 BF 620 B14 B34  
2 BG 620 B14 B34 EA14 EF11 EF21  
3 BG 620 B14  
4 BG 620 B14  
5 BG 620 A14 B14 B34

**Original Properties**

Modulus @ 100% Elongation	282 psi	1.9 MPa
Tensile Strength	2141 psi	14.8 MPa
Ultimate Elongation	600 %	
Hardness, Shore A	61 Durometer	
Specific Gravity	1.26 grams/cc	
Brittleness Temperature	-36 °F	-38 °C
Tear Resistance, Die B	268 ppi	46.9 kN/m
Tear Resistance, Die C	236 ppi	41.3 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	9.1 %
Solid: 22 hrs @ 257°F (125°C)	10.0 %
Solid: 70 hrs @ 212°F (100°C)	11.9 %
Plied: 22 hrs @ 212°F (100°C)	20.0 %
Plied: 22 hrs @ 257°F (125°C)	24.9 %
Plied: 70 hrs @ 212°F (100°C)	25.5 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 7.3 %
Change - Elongation	- 25.0 %
Change - Hardness, Shore A	+ 8

**HEAT AGED: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 10.0 %
Change - Elongation	- 45.0 %
Change - Hardness, Shore A	+ 2

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

Change - Tensile Strength	+ 10.0 %
Change - Elongation	- 45.0 %
Change - Hardness, Shore A	+ 2



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Change - Hardness, Shore A	- 2
Change - Volume	+ 4.4 %

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

Change - Tensile Strength	- 7.8 %
Change - Elongation	- 6.7 %
Change - Hardness, Shore A	- 2
Change - Volume	- 1.2 %

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

Change - Tensile Strength	- 39.5 %
Change - Elongation	- 43.3 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 17.5 %

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

Change - Tensile Strength	- 48.7 %
Change - Elongation	- 43.3 %
Change - Hardness, Shore A	- 13
Change - Volume	+ 30.9 %

**ASTM OIL #1: 70 hrs @ 212°F (100°C)**

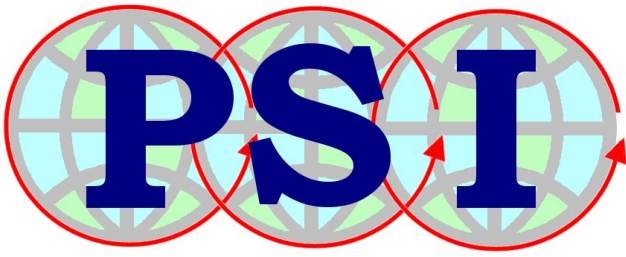
Change - Tensile Strength	+ 7.9 %
Change - Elongation	- 5.0 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 13.3 %

**ASTM OIL #1: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 10.0 %
Change - Elongation	- 30.0 %
Change - Hardness, Shore A	+ 10
Change - Volume	- 13.0 %

**ASTM OIL #1: 70 hrs @ 302°F (150°C)**

Change - Tensile Strength	+ 13.2 %
Change - Elongation	- 43.3 %
Change - Hardness, Shore A	+ 12
Change - Volume	- 13.8 %



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**PRODUCT DATA SHEET**

**ASTM OIL #3: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 3.9 %
Change - Elongation	- 20.0 %
Change - Hardness, Shore A	0
Change - Volume	- 5.0 %

**ASTM OIL #3: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 6.4 %
Change - Elongation	- 23.3 %
Change - Hardness, Shore A	+ 6
Change - Volume	- 2.7 %

**ASTM OIL #3: 70 hrs @ 302°F (150°C)**

Change - Tensile Strength	- 1.4 %
Change - Elongation	- 33.3 %
Change - Hardness, Shore A	+ 7
Change - Volume	- 2.3 %

**Tear Resistance, Method D 624, Die B**

Tear Resistance	268.0 ppi
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**Tear Resistance, Method D 624, Die C**

Tear Resistance	236.0 ppi
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