



Compound

**3917****NITRILE BUTADIENE  
90 DUROMETER  
BLACK - MOLY FILLED****PRODUCT DATA SHEET**

Compound 3917 is a 90 durometer black colored Buna N elastomer, it is formulated with molybdenum disulfide to provide internal lubrication. It exhibits good resistance to aliphatic and aromatic fuels.

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

ASTM D2000 6 BG 915 A14 B14 B34 EO14  
7 BG 915 B14 EO14 EA14 EF11 EF21  
4 BK 915 B14 B34 EF11 EF21 EO34

**Original Properties**

Modulus @ 100% Elongation	2298 psi	15.8 MPa
Tensile Strength	2522 psi	17.4 MPa
Ultimate Elongation	110 %	
Hardness, Shore A	88 Durometer	
Specific Gravity	1.35 grams/cc	
Brittleness Temperature	-29 °F	-34 °C
Tear Resistance, Die B	170 ppi	29.8 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	10.0 %
Plied: 22 hrs @ 212°F (100°C)	20.0 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 2.3 %
Change - Elongation	- 36.4 %
Change - Hardness, Shore A	+ 4

**HEAT AGED: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	- 5.8 %
Change - Elongation	- 63.6 %
Change - Hardness, Shore A	+ 7

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

Change - Tensile Strength	- 5.8 %
Change - Elongation	- 63.6 %
Change - Hardness, Shore A	+ 7

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

Change - Hardness, Shore A	- 1
Change - Volume	+ 4.4 %



Compound

**3917****NITRILE BUTADIENE  
90 DUROMETER  
BLACK - MOLY FILLED****PRODUCT DATA SHEET****ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)**

Change - Tensile Strength	+ 0.9 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	0
Change - Volume	- 0.1 %

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

Change - Tensile Strength	- 14.1 %
Change - Elongation	- 18.2 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 16.5 %

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

Change - Tensile Strength	- 29.1 %
Change - Elongation	- 27.3 %
Change - Hardness, Shore A	- 12
Change - Volume	+ 29.0 %

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

Change - Tensile Strength	- 0.4 %
Change - Elongation	- 36.4 %
Change - Hardness, Shore A	+ 6
Change - Volume	- 8.2 %

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

Change - Tensile Strength	+ 8.6 %
Change - Elongation	- 18.2 %
Change - Hardness, Shore A	+ 1
Change - Volume	+ 0.6 %

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

Tear Resistance	170.0 ppi
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