



Compound

3517**NITRILE - BUTADIENE
50 DUROMETER
BLACK MOLY FILLED****PRODUCT DATA SHEET**

Compound 3517 is a 50 durometer black colored Buna N elastomer, it is formulated with molybdenum disulfide as an internal lubricant. It exhibits good resistance to heat, compression set and petroleum based oils. It will remain non brittle at low temperatures.

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

ASTM D2000 2 BG 512 B14 B34 EO34 EF11 EF21 F17 EA14
5 BG 510 A14 B14 B34 EO34

Original Properties

Modulus @ 100% Elongation	181 psi	1.3 MPa
Tensile Strength	1236 psi	8.5 MPa
Ultimate Elongation	725 %	
Hardness, Shore A	50 Durometer	
Specific Gravity	1.26 grams/cc	
Brittleness Temperature	-59 °F	-51 °C
Tear Resistance, Die B	137 ppi	24.0 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	21.3 %
Plied: 22 hrs @ 212°F (100°C)	22.9 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 0.1 %
Change - Elongation	- 25.9 %
Change - Hardness, Shore A	+ 8
Change - Weight	- 8.2 %

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 34.2 %
Change - Elongation	- 44.8 %
Change - Hardness, Shore A	+ 15
Change - Weight	- 12.5 %

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

Change - Tensile Strength	+ 34.2 %
Change - Elongation	- 44.8 %
Change - Hardness, Shore A	+ 15
Change - Weight	- 12.5 %

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

Change - Tensile Strength	- 36.5 %
Change - Elongation	- 42.5 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 10.3 %



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Change - Tensile Strength	- 24.7 %
Change - Elongation	- 13.1 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 2.2 %

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

Change - Tensile Strength	- 58.3 %
Change - Elongation	- 57.9 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 26.4 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 34.2 %
Change - Elongation	- 11.4 %
Change - Hardness, Shore A	+ 9
Change - Volume	- 13.1 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 7.1 %
Change - Elongation	- 24.1 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 6.8 %

Tear Resistance, Method D 624, Die B

Tear Resistance	137.0 ppi
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