

Compound

3817**NITRILE BUTADIENE
80 DUROMETER
BLACK - MOLY FILLED****PRODUCT DATA SHEET**

Compound 3817 is an 80 durometer black colored Buna N elastomer, it is internally lubricated with molybdenum disulfide. It exhibits good resistance to compression set, aliphatic and aromatic fuels.

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

ASTM D2000 2 BF 810 B14 B34 EO14
6 BF 810 A14 B14 B34 EO14
7 BG 810 B14 EO14 EF11 EF21 EA14
4 BK 810 A24 B14 B34 EF11 EF21

Original Properties

Modulus @ 100% Elongation	911 psi	6.3 MPa
Tensile Strength	1394 psi	9.6 MPa
Ultimate Elongation	238 %	
Hardness, Shore A	82 Durometer	
Specific Gravity	1.42 grams/cc	
Brittleness Temperature	-9 °F	-23 °C
Tear Resistance, Die B	312 ppi	54.6 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	16.1 %
Plied: 22 hrs @ 212°F (100°C)	0.0 %

HEAT AGED: 70 hrs @ 212°F (100°C)

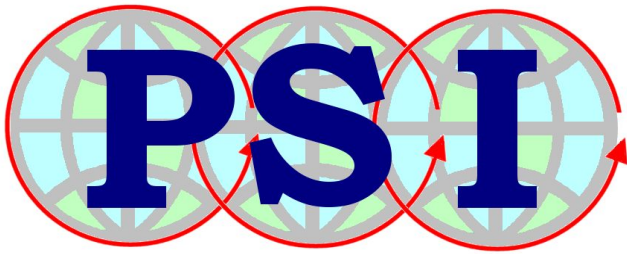
Change - Tensile Strength	+ 18.8 %
Change - Elongation	+ 28.2 %
Change - Hardness, Shore A	+ 6
Change - Weight	- 1.9 %

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 46.2 %
Change - Elongation	- 58.0 %
Change - Hardness, Shore A	+ 12
Change - Weight	- 6.1 %

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

Change - Tensile Strength	+ 46.2 %
Change - Elongation	- 58.0 %
Change - Hardness, Shore A	+ 12
Change - Weight	- 6.1 %



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BLACK - MOLY FILLED****PRODUCT DATA SHEET****Compression Set, Plied: 22 hrs @ 212°F (100°C)**

Change - Tensile Strength + 16.6 %

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

Change - Tensile Strength + 14.2 %

Change - Elongation - 12.2 %

Change - Hardness, Shore A - 4

Change - Volume + 11.0 %

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

Change - Tensile Strength + 3.6 %

Change - Elongation + 7.1 %

Change - Hardness, Shore A - 5

Change - Volume + 0.1 %

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

Change - Tensile Strength - 16.8 %

Change - Elongation - 22.3 %

Change - Hardness, Shore A - 18

Change - Volume + 20.0 %

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

Change - Tensile Strength - 13.0 %

Change - Elongation - 19.3 %

Change - Hardness, Shore A - 21

Change - Volume + 20.3 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength + 23.0 %

Change - Elongation - 16.0 %

Change - Hardness, Shore A + 10

Change - Volume - 8.6 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength + 15.9 %

Change - Elongation - 16.0 %

Change - Hardness, Shore A + 5

Change - Volume - 3.3 %

Tear Resistance, Method D 624, Die B

Tear Resistance 312.0 ppi