

Compound

3818**NITRILE BUTADIENE
80 - DUROMETER
BLACK - TEFLON FILLED****PRODUCT DATA SHEET**

Compound 3818 is an 80 durometer black colored Buna N elastomer, it is formulated with TEFLON to provide internal lubrication.

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

ASTM D2000 2 BF 820 B14 EO14 EO34
3 BG 820 B14 EO14
4 BG 820 A14 B14 EO14
6 BG 820 A14 B14 EO14 EO34
7 BG 820 B14 EA14 EF11 EF21
4 BK 820 A24 B14 EF11 EO14

Original Properties

Modulus @ 100% Elongation	590 psi	4.1 MPa
Tensile Strength	2474 psi	17.1 MPa
Ultimate Elongation	503 %	
Hardness, Shore A	77 Durometer	
Specific Gravity	1.28 grams/cc	
Brittleness Temperature	-20 °F	-29 °C
Tear Resistance, Die B	282 ppi	49.4 kN/m
Tear Resistance, Die C	240 ppi	42.0 kN/m

Compression Set

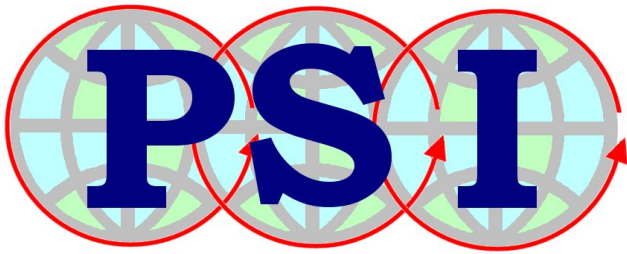
Solid: 22 hrs @ 212°F (100°C)	23.3 %
Solid: 70 hrs @ 212°F (100°C)	29.2 %
Solid: 70 hrs @ 257°F (125°C)	27.4 %
Plied: 22 hrs @ 212°F (100°C)	29.9 %
Plied: 22 hrs @ 257°F (125°C)	32.9 %
Plied: 70 hrs @ 212°F (100°C)	37.5 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 2.9 %
Change - Elongation	- 11.9 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 8.2 %
Change - Elongation	- 34.4 %
Change - Hardness, Shore A	+ 3



Compound

3818NITRILE BUTADIENE
80 - DUROMETER
BLACK - TEFLON FILLED**PRODUCT DATA SHEET****HEAT AGED: 70 hrs @ 212°F (100°C) Test Tube**

Change - Tensile Strength	- 2.9 %
Change - Elongation	- 11.9 %
Change - Hardness, Shore A	0

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

Change - Tensile Strength	- 8.2 %
Change - Elongation	- 34.4 %
Change - Hardness, Shore A	+ 3

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

Change - Hardness, Shore A	- 7
Change - Volume	+ 8.5 %

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

Change - Tensile Strength	- 11.4 %
Change - Elongation	- 7.2 %
Change - Hardness, Shore A	0
Change - Volume	+ 2.0 %

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

Change - Tensile Strength	- 58.5 %
Change - Elongation	- 41.7 %
Change - Hardness, Shore A	- 14
Change - Volume	+ 33.5 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 3.5 %
Change - Elongation	- 15.7 %
Change - Hardness, Shore A	- 3
Change - Volume	- 0.8 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 2.8 %
Change - Elongation	- 5.4 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 8.9 %