

Compound
5748
 NITRILE - BUTADIENE
 75 DUROMETER
 BLACK COLOR

PRODUCT DATA SHEET

Compound 5748 is a 75 durometer black colored Buna N elastomer. It exhibits good resistance to compression set at moderate temperatures, petroleum based oils and aliphatic fuels. It also has excellent tear resistance.

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

- ASTM D2000 2 BF 815 B14 B34 EO14 EO34 Z1
- 6 BG 815 A14 B14 B34 EO14 EO34 Z1
- 7 BG 815 B14 EA14 EF11 EF21 EO14 EO34 Z1
- 3 CH 815 A25 B14 B34 EO16 EO36 Z1
- 4 CH 815 A25 B14 EF31 EO15 EO35 Z1

Z1 = 78 +/- 5 Shore A Durometer

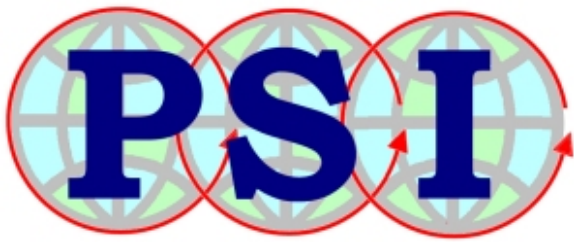


Original Properties

Modulus @ 100% Elongation	744 psi	5.1 MPa
Tensile Strength	1,988 psi	13.7 MPa
Ultimate Elongation	253 %	
Hardness, Shore A	75 Durometer	
Specific Gravity	1.28 grams/cc	
Brittleness Temperature	-26 °F	-32 °C
TR-10 Temperature	-17 °F	-27 °C
Tear Resistance, Die B	299.0 ppi	52.4 kN/m
Tear Resistance, Die C	182.0 ppi	31.9 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	6.6 %
Solid: 22 hrs @ 257°F (125°C)	10.8 %
Solid: 70 hrs @ 212°F (100°C)	9.5 %
Plied: 22 hrs @ 212°F (100°C)	14.5 %
Plied: 22 hrs @ 257°F (125°C)	20.4 %
Plied: 70 hrs @ 212°F (100°C)	17.8 %



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Change - Tensile Strength	+ 14.1 %
Change - Elongation	- 18.6 %
Change - Hardness, Shore A	+ 7

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 10.9 %
Change - Elongation	- 49.8 %
Change - Hardness, Shore A	+ 12

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

Change - Hardness, Shore A	- 5
Change - Volume	+ 4.8 %

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

Change - Tensile Strength	- 5.7 %
Change - Elongation	- 10.3 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 1.2 %

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

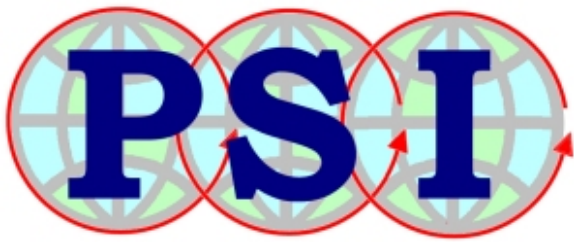
Change - Tensile Strength	- 21.0 %
Change - Elongation	- 22.9 %
Change - Hardness, Shore A	- 12
Change - Volume	+ 27.8 %

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

Change - Tensile Strength	- 45.4 %
Change - Elongation	- 49.0 %
Change - Hardness, Shore A	- 14
Change - Volume	+ 49.7 %

ASTM OIL #1 (IRM 901): 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 14.1 %
Change - Elongation	- 4.3 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 3.5 %



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ASTM OIL #1 (IRM 901): 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 12.2 %
Change - Elongation	- 15.4 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 3.3 %

ASTM OIL #1 (IRM 901): 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 13.4 %
Change - Elongation	- 28.9 %
Change - Hardness, Shore A	+ 6
Change - Volume	- 3.2 %

ASTM OIL #3 (IRM 903): 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 11.0 %
Change - Elongation	- 1.2 %
Change - Hardness, Shore A	+ 5
Change - Volume	+ 9.0 %

ASTM OIL #3 (IRM 903): 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 11.2 %
Change - Elongation	- 11.1 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 10.2 %

ASTM OIL #3 (IRM 903): 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 11.9 %
Change - Elongation	- 23.2 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 11.2 %