

Compound

5780NITRILE - BUTADIENE
70 DUROMETER
BLACK COLOR**PRODUCT DATA SHEET**

Compound 5780 is a 70 durometer black colored Buna N elastomer. It exhibits good resistance to heat, water, fuels and oils.

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

ASTM D2000 M2 BF 714 B14 B34 EO14 EO34

M2 BG 714 B14 B34 EA14 EF11 EF21 EO14 EO34

M2 BK 714 B14 B34 EF11 EF21 EO14

**Original Properties**

Modulus @ 100% Elongation	550 psi	3.8 MPa
Tensile Strength	2,447 psi	16.9 MPa
Ultimate Elongation	425 %	
Hardness, Shore A	69 Durometer	
Specific Gravity	1.23 grams/cc	
TR-10 Temperature	-30 °F	-34 °C

Compression Set

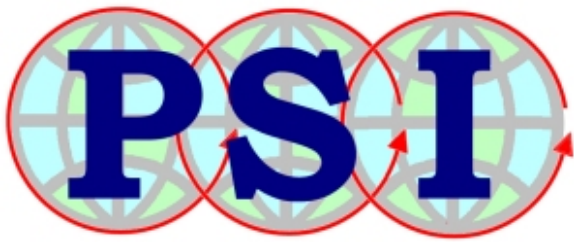
Plied: 22 hrs @ 212°F (100°C)	14.3 %
Plied: 70 hrs @ 212°F (100°C)	22.0 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 8.7 %
Change - Elongation	- 9.7 %
Change - Hardness, Shore A	+ 5

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 18.4 %
Change - Elongation	- 31.1 %
Change - Hardness, Shore A	+ 6



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BLACK COLOR**PRODUCT DATA SHEET****DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 2.7 %
Change - Elongation	- 7.3 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 3.6 %

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

Change - Tensile Strength	- 3.4 %
Change - Elongation	- 3.3 %
Change - Hardness, Shore A	+ 3
Change - Volume	+ 0.1 %

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

Change - Tensile Strength	- 31.5 %
Change - Elongation	- 33.2 %
Change - Hardness, Shore A	- 8
Change - Volume	+ 16.5 %

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

Change - Tensile Strength	- 30.0 %
Change - Elongation	- 26.6 %
Change - Hardness, Shore A	- 12
Change - Volume	+ 25.9 %

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

Change - Tensile Strength	- 2.2 %
Change - Elongation	- 15.1 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 2.5 %

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

Change - Tensile Strength	- 6.5 %
Change - Elongation	- 7.5 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 4.3 %