



Compound

**5716**NITRILE - BUTADIENE  
70 DUROMETER  
BLACK COLOR**PRODUCT DATA SHEET**

Compound 5716 is a 70 durometer black colored Buna N elastomer, it is formulated for low temperature flexibility. It exhibits good resistance to petroleum based oils and gasoline type fuels. It also offers good resistance to boiling water. The working temperature range for this compound is -40°F to 212°F with intermitten peaks to 250°F.

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

ASTM D2000 2 BF 715 B14 B34 EO14 EO34

2 BG 715 B14 B34 EO14 EO34 EF11 EF21 EA14 F17  
5 BG 715 A14 B14 B34 EO14 EO34**This Compound is RoHS Compliant****Original Properties**

Modulus @ 100% Elongation	623 psi	4.3 MPa
Tensile Strength	1,821 psi	12.6 MPa
Ultimate Elongation	280 %	
Hardness, Shore A	71 Durometer	
Specific Gravity	1.30 grams/cc	
Brittleness Temperature	-53 °F	-47 °C
Tear Resistance, Die B	241 ppi	42.2 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	9.6 %
Solid: 70 hrs @ 212°F (100°C)	13.0 %
Plied: 22 hrs @ 212°F (100°C)	16.1 %
Plied: 70 hrs @ 212°F (100°C)	20.0 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 7.1 %
Change - Elongation	- 21.4 %
Change - Hardness, Shore A	+ 6



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Change - Tensile Strength	+ 16.6 %
Change - Elongation	- 53.6 %
Change - Hardness, Shore A	+ 19

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

Change - Tensile Strength	+ 16.6 %
Change - Elongation	- 53.6 %
Change - Hardness, Shore A	+ 19

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

Change - Hardness, Shore A	- 2
Change - Volume	+ 3.3 %

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

Change - Tensile Strength	- 5.4 %
Change - Elongation	- 3.6 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 4.2 %

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

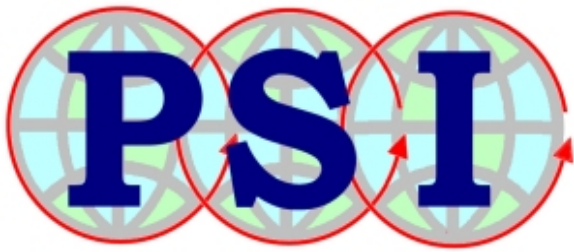
Change - Tensile Strength	- 21.4 %
Change - Elongation	- 32.1 %
Change - Hardness, Shore A	- 16
Change - Volume	+ 27.3 %

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

Change - Tensile Strength	- 40.9 %
Change - Elongation	- 50.0 %
Change - Hardness, Shore A	- 22
Change - Volume	+ 54.0 %

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

Change - Tensile Strength	+ 11.3 %
Change - Elongation	- 10.7 %
Change - Hardness, Shore A	+ 9
Change - Volume	- 7.7 %



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

Change - Tensile Strength	+ 5.5 %
Change - Elongation	- 10.7 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 10.8 %

**TR-10 : ASTM D1329 (10% Retraction @ °F)**

Temperature	- 44.0 °F
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