

Compound

3708**NITRILE - BUTADIENE
60 DUROMETER
BLACK HOT WATER RESIT.****PRODUCT DATA SHEET**

Compound 3708 is a 70 durometer black colored Buna N elastomer, it is formulated for good resistance to hot and cold water. It also has good resistance to heat, compression set and hot petroleum based oils.

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

ASTM D2000 2 BF 725 B14 B34 EO14 EO34
2 BG 725 B14 B34 EO14 EO34 EF11 EF21 EA14
3 BG 725 B14 EO14
4 BG 720 B14 EO14
5 BG 720 A14 B14 B34 EO14 EO34
4 BK 725 A24 B14 B34 EO14 EO34
2 CH 725 A25 B14 B34 EO15 EO35
3 CH 725 A25 B14 B34 EO16 EO36
5 CH 720 A25 B14 B34 F14
6 CH 720 B14 B34 EO36

Original Properties

Modulus @ 100% Elongation	494 psi	3.4 MPa
Tensile Strength	2822 psi	19.5 MPa
Ultimate Elongation	350 %	
Hardness, Shore A	70 Durometer	
Specific Gravity	1.18 grams/cc	
Brittleness Temperature	-35 °F	-37 °C
Tear Resistance, Die B	228 ppi	39.9 kN/m

Compression Set

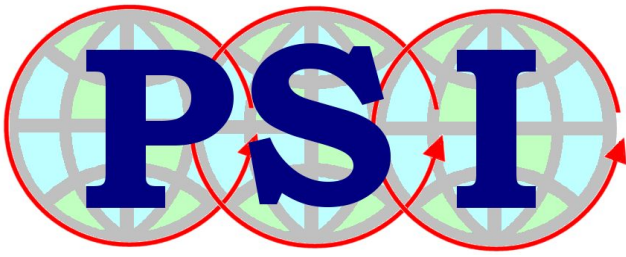
Solid: 22 hrs @ 212°F (100°C)	7.0 %
Solid: 70 hrs @ 212°F (100°C)	12.1 %
Plied: 22 hrs @ 212°F (100°C)	13.5 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 15.8 %
Change - Elongation	- 11.4 %
Change - Hardness, Shore A	+ 6

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 13.4 %
Change - Elongation	- 31.4 %
Change - Hardness, Shore A	+ 10



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Change - Tensile Strength	+ 13.4 %
Change - Elongation	- 31.4 %
Change - Hardness, Shore A	+ 10

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

Change - Tensile Strength	+ 1.6 %
Change - Elongation	+ 5.7 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 0.6 %

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

Change - Tensile Strength	- 38.2 %
Change - Elongation	- 31.4 %
Change - Hardness, Shore A	- 14
Change - Volume	+ 29.7 %

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

Change - Tensile Strength	- 57.8 %
Change - Elongation	- 48.6 %
Change - Hardness, Shore A	- 17
Change - Volume	+ 50.9 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

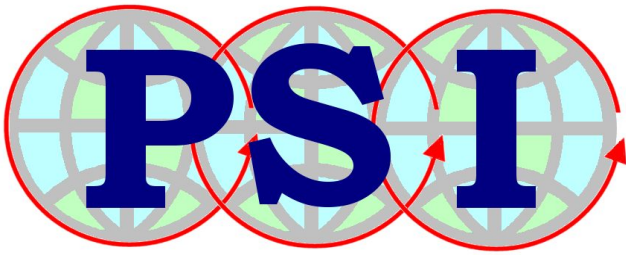
Change - Tensile Strength	+ 19.5 %
Change - Elongation	+ 2.9 %
Change - Hardness, Shore A	+ 2
Change - Volume	- 4.9 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 11.0 %
Change - Elongation	- 11.4 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 5.3 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 8.4 %
Change - Elongation	- 22.9 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 5.8 %



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ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 2.9 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 9.1 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 3.0 %
Change - Elongation	- 8.6 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 10.8 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 14.7 %
Change - Elongation	+ 5.7 %
Change - Hardness, Shore A	- 8
Change - Volume	+ 10.7 %

Tear Resistance, Method D 624, Die B

Tear Resistance	228.0 ppi
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