



Compound

5742NITRILE - BUTADIENE
70 DUROMETER
RED COLOR**PRODUCT DATA SHEET**

Compound 5742 is a 70 durometer red colored general purpose Buna N elastomer. It exhibits good resistance to heat and petroleum based oils.

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

ASTM D2000 2 BF 720 EO14 EO34
2 BG 720 EO14 EO34 EF11 EF21 EA14
3 BG 720 B14 EO14
4 BG 720 B14 EO14
5 BG 720 A14 EO14 EO34
4 BK 720 A24 EF11 EO14 EO34

Original Properties

Modulus @ 100% Elongation	599 psi	4.1 MPa
Tensile Strength	2461 psi	17.0 MPa
Ultimate Elongation	667 %	
Hardness, Shore A	74 Durometer	
Specific Gravity	1.39 grams/cc	
Brittleness Temperature	3 °F	-16 °C
Tear Resistance, Die B	227 ppi	39.8 kN/m
Tear Resistance, Die C	248 ppi	43.4 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	38.3 %
Solid: 22 hrs @ 257°F (125°C)	45.9 %
Solid: 70 hrs @ 212°F (100°C)	49.8 %
Plied: 22 hrs @ 212°F (100°C)	46.5 %
Plied: 22 hrs @ 257°F (125°C)	52.0 %
Plied: 70 hrs @ 212°F (100°C)	66.1 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 9.3 %
Change - Elongation	- 16.9 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 24.2 %
Change - Elongation	- 46.5 %
Change - Hardness, Shore A	+ 3



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Change - Tensile Strength	- 9.3 %
Change - Elongation	- 16.9 %
Change - Hardness, Shore A	0

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

Change - Hardness, Shore A	- 9
Change - Volume	+ 5.0 %

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

Change - Tensile Strength	- 0.4 %
Change - Elongation	- 5.2 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.6 %

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

Change - Tensile Strength	- 58.1 %
Change - Elongation	- 29.5 %
Change - Hardness, Shore A	- 14
Change - Volume	+ 25.7 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 2.2 %
Change - Elongation	- 5.1 %
Change - Hardness, Shore A	0
Change - Volume	- 3.9 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 5.2 %
Change - Elongation	- 12.4 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 2.7 %