



Compound

3544**NITRILE - BUTADIENE
50 DUROMETER - BLACK
FDA SANCTIONED MAT'L****PRODUCT DATA SHEET**

Compound 3544 is a 50 durometer black colored Buna N elastomer, it is formulated with FDA sanctioned materials and is non-crazing on plastics. It exhibits good resistance to heat, compression set and petroleum based oils.

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

ASTM D2000 2 BG 515 B14 B34 EA14 EF11 F17
3 BG 515 B14
4 BG 515 B14 EO34
5 BG 515 A14 B14 B34 EO34

CFR21 177.2600

Original Properties

Modulus @ 100% Elongation	168 psi	1.2 MPa
Tensile Strength	1519 psi	10.5 MPa
Ultimate Elongation	596 %	
Hardness, Shore A	51 Durometer	
Specific Gravity	1.12 grams/cc	
Brittleness Temperature	-45 °F	-43 °C
Tear Resistance, Die B	114 ppi	20.0 kN/m
Tear Resistance, Die C	144 ppi	25.2 kN/m

Compression Set

Solid: 22 hrs @ 158°F (70°C)	5.4 %
Solid: 22 hrs @ 212°F (100°C)	8.3 %
Solid: 22 hrs @ 257°F (125°C)	12.4 %
Solid: 70 hrs @ 212°F (100°C)	13.1 %
Plied: 22 hrs @ 158°F (70°C)	8.2 %
Plied: 22 hrs @ 212°F (100°C)	15.8 %
Plied: 22 hrs @ 257°F (125°C)	20.1 %
Plied: 70 hrs @ 212°F (100°C)	21.2 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 3.6 %
Change - Elongation	- 25.1 %
Change - Hardness, Shore A	+ 4

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 3.2 %
Change - Elongation	- 36.2 %
Change - Hardness, Shore A	+ 7



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

Change - Hardness, Shore A	0
Change - Volume	+ 2.7 %

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

Change - Tensile Strength	+ 12.4 %
Change - Elongation	+ 3.3 %
Change - Hardness, Shore A	0
Change - Volume	- 0.7 %

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

Change - Tensile Strength	- 61.0 %
Change - Elongation	- 42.9 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 20.7 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 54.8 %
Change - Elongation	+ 6.5 %
Change - Hardness, Shore A	+ 5
Change - Volume	+ 1.5 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 28.3 %
Change - Elongation	+ 2.1 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.5 %