



Compound

**3505**NITRILE - BUTADIENE  
60 DUROMETER  
BLACK - COLOR**PRODUCT DATA SHEET**

Compound 3505 is a 60 durometer black colored Buna N elastomer.

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

ASTM D2000 2 BF 615 B14 B34

2 BG 615 B14 B34 EA14 EF11 EF21  
5 BG 615 A14 B14 B34

MIL-G-1149 TYPE 11 Class 5

**Original Properties**

Modulus @ 100% Elongation	306 psi	2.1 MPa
Tensile Strength	1861 psi	12.8 MPa
Ultimate Elongation	480 %	
Hardness, Shore A	65 Durometer	
Specific Gravity	1.21 grams/cc	
Brittleness Temperature	-29 °F	-34 °C
Tear Resistance, Die B	219 ppi	38.4 kN/m
Tear Resistance, Die C	222 ppi	38.9 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	7.0 %
Solid: 70 hrs @ 212°F (100°C)	10.6 %
Plied: 22 hrs @ 212°F (100°C)	16.0 %
Plied: 70 hrs @ 212°F (100°C)	21.8 %
Solid: 94 hrs @ 158°F (70°C)	15.9 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 3.0 %
Change - Elongation	- 21.7 %
Change - Hardness, Shore A	+ 11

**HEAT AGED: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 1.7 %
Change - Elongation	- 47.9 %
Change - Hardness, Shore A	+ 17

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

Change - Tensile Strength	+ 1.7 %
Change - Elongation	- 47.9 %
Change - Hardness, Shore A	+ 17



Compound

**3505**NITRILE - BUTADIENE  
60 DUROMETER  
BLACK - COLOR**PRODUCT DATA SHEET****HEAT AGED: 94 hrs @ 158°F (70°C)**

Change - Tensile Strength	+ 10.5 %
Change - Elongation	+ 16.7 %
Change - Hardness, Shore A	+ 2

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

Change - Hardness, Shore A	- 4
Change - Volume	+ 14.5 %

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

Change - Tensile Strength	- 5.1 %
Change - Elongation	+ 10.4 %
Change - Hardness, Shore A	0
Change - Volume	- 1.3 %

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

Change - Tensile Strength	- 34.1 %
Change - Elongation	- 12.5 %
Change - Hardness, Shore A	- 10
Change - Volume	+ 14.5 %

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

Change - Tensile Strength	- 4.4 %
Change - Elongation	- 31.4 %
Change - Hardness, Shore A	- 13
Change - Volume	+ 29.5 %

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

Change - Tensile Strength	+ 13.4 %
Change - Elongation	+ 4.2 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 12.5 %

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

Change - Tensile Strength	+ 11.9 %
Change - Elongation	+ 10.4 %
Change - Hardness, Shore A	0
Change - Volume	- 4.5 %