



Compound

4503**CHLOROPRENE
50 DUROMETER
BLACK - LOW TEMP.****PRODUCT DATA SHEET**

Compound 4503 is 50 durometer black colored Neoprene elastomer, it is formulated to have good low temperature flexibility. It exhibits good resistance to compression set at moderate heat.

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

ASTM D2000 2 BC 515 A14 B14 C12 EO14 EO34 F17
5 BC 515 A14 B14 C12 EO14 EO34 F19
6 BC 515 A14 B14 C12 EO14 EO34 F17

2 BE 515 A14 B14 C12 EO14 EO34 F17
3 BE 515 A14 B14 C12 EO14 EO34 F19

MIL-STD-417 SC 515 A1 B1 E3 F2
MIL-R-6855 Class 2. Type A & B, Grade 50

Original Properties

Modulus @ 100% Elongation	192 psi	1.3 MPa
Tensile Strength	1863 psi	12.8 MPa
Ultimate Elongation	440 %	
Hardness, Shore A	54 Durometer	
Specific Gravity	1.35 grams/cc	
Brittleness Temperature	-67 °F	-55 °C
Tear Resistance, Die B	88 ppi	15.4 kN/m
Tear Resistance, Die C	128 ppi	22.4 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	7.9 %
Solid: 70 hrs @ 212°F (100°C)	14.9 %
Plied: 22 hrs @ 212°F (100°C)	12.8 %
Plied: 70 hrs @ 212°F (100°C)	22.7 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 6.1 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	+ 3

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 14.0 %
Change - Elongation	- 9.1 %
Change - Hardness, Shore A	+ 11

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

Change - Tensile Strength	+ 14.0 %
Change - Elongation	- 9.1 %
Change - Hardness, Shore A	+ 11



Compound

4503CHLOROPRENE
50 DUROMETER
BLACK - LOW TEMP.**PRODUCT DATA SHEET****DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)**

Change - Hardness, Shore A	- 1
Change - Volume	+ 10.7 %

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

Change - Tensile Strength	- 14.1 %
Change - Elongation	- 6.8 %
Change - Hardness, Shore A	0
Change - Volume	+ 4.3 %

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

Change - Tensile Strength	- 52.1 %
Change - Elongation	- 43.2 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 44.7 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 5.9 %
Change - Elongation	- 2.3 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 7.4 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 43.4 %
Change - Elongation	- 36.4 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 54.5 %

Tear Resistance, Method D 624, Die B

Tear Resistance	88.0 ppi
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Tear Resistance, Method D 624, Die C

Tear Resistance	128.0 ppi
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