



Compound

9819**FLUORINATED
HYDROCARBON - 80 DURO
BLACK-GRAPHITE FILLED****PRODUCT DATA SHEET**

Compound 9819 is an 80 durometer black colored Fluorinated Hydrocarbon elastomer, it is formulated with Graphite to provide internal lubrication. It exhibits excellent resistance to heat, compression set, petroleum based oils, aliphatic and aromatic fuels.

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

ASTM D2000 2 HK 810 A1-10 B37 B38 EO78
4 HK 810 A1-11 B38 EO78
6 HK 810 A1-10 A1-11 B31 B38 EO88

Original Properties

Modulus @ 100% Elongation	1015 psi	7.0 MPa
Tensile Strength	1440 psi	9.9 MPa
Ultimate Elongation	175 %	
Hardness, Shore A	79 Durometer	
Specific Gravity	1.87 grams/cc	
Brittleness Temperature	0 °F	-18 °C
Tear Resistance, Die B	176 ppi	30.8 kN/m

Compression Set

Solid: 22 hrs @ RT (73°F, 23°C)	7.5 %
Solid: 22 hrs @ 347°F (175°C)	8.3 %
Solid: 22 hrs @ 392°F (200°C)	10.1 %
Plied: 22 hrs @ RT (73°F, 23°C)	9.6 %
Plied: 22 hrs @ 347°F (175°C)	11.1 %
Plied: 22 hrs @ 392°F (200°C)	11.9 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	+ 1.3 %
Change - Elongation	- 12.0 %
Change - Hardness, Shore A	0
Change - Weight	- 1.0 %

HEAT AGED: 70 hrs @ 527°F (275°C)

Change - Tensile Strength	+ 0.7 %
Change - Elongation	- 6.9 %
Change - Hardness, Shore A	+ 2
Change - Weight	- 1.8 %

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

Change - Tensile Strength	- 5.0 %
Change - Elongation	+ 16.6 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 2.6 %



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Change - Tensile Strength	- 12.4 %
Change - Elongation	- 4.6 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 1.3 %

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

Change - Tensile Strength	- 12.8 %
Change - Elongation	- 9.1 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 3.1 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 8.8 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 0.2 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 1.4 %
Change - Elongation	+ 5.1 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 1.3 %

SERVICE FLUID 101: 70 hrs @ 392°F (200°C)

Change - Tensile Strength	- 17.8 %
Change - Elongation	- 12.0 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 9.1 %

STAUFFER BLEND 7700: 70 hrs @ 392°F (200°C)

Change - Tensile Strength	+ 21.3 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 8
Change - Volume	+ 17.6 %