



Compound

9946**FLUORINATED
HYDROCARBON - 90 DURO
BLACK COLOR****PRODUCT DATA SHEET**

Compound 9946 is a 90 durometer black colored Fluorinated Hydrocarbon elastomer. It exhibits good resistance to heat, petroleum based oils, aliphatic and aromatic fuels.

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

ASTM D2000 3 HK 915 A1-10 B37 B38 EF31 EO78
5 HK 915 A1-11 B38 EF31 EO78
7 HK 915 A1-10 A1-11 EF31 EO88

Original Properties

Modulus @ 100% Elongation	1418 psi	9.8 MPa
Tensile Strength	1722 psi	11.9 MPa
Ultimate Elongation	130 %	
Hardness, Shore A	95 Durometer	
Specific Gravity	1.83 grams/cc	
Brittleness Temperature	10 °F	-12 °C
Tear Resistance, Die B	200 ppi	35.0 kN/m
Tear Resistance, Die C	159 ppi	27.8 kN/m

Compression Set

Plied: 22 hrs @ RT (73°F, 23°C)	22.3 %
Plied: 22 hrs @ 347°F (175°C)	18.1 %
Plied: 22 hrs @ 392°F (200°C)	22.0 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	+ 3.4 %
Change - Elongation	- 15.4 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 527°F (275°C)

Change - Tensile Strength	- 26.2 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	+ 1

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

Change - Hardness, Shore A	- 3
Change - Volume	+ 2.2 %

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

Change - Tensile Strength	+ 0.3 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.1 %



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

Change - Tensile Strength	- 6.8 %
Change - Elongation	- 7.7 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 1.0 %

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

Change - Tensile Strength	- 6.3 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 2.1 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 0.9 %
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	- 5.5 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 1.3 %

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

Change - Tensile Strength	- 13.6 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 6.9 %

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

Change - Tensile Strength	- 14.6 %
Change - Elongation	- 7.7 %
Change - Hardness, Shore A	- 9
Change - Volume	+ 11.2 %