

Compound

9901FLUORINATED HYDROCARBON
90 DUROMETER - BLACK COLOR
LOW TEMPERATURE**PRODUCT DATA SHEET**

Compound 9901 is a 90 durometer black colored Fluorinated Hydrocarbon elastomer. It is specifically formulated for low temperature applications, it has a true TR-10 of -40°C(-40°F). It also exhibits good resistance to compression set, petroleum based oils, aliphatic and aromatic fuels and oxygenated fuels.

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

ASTM D2000 3 HK 920 A1-10 B37 B38 EO78
5 HK 920 A1-11 B38 EO78 F15
7 HK 920 A1-10 A1-11 B38 EO88 F15

**Original Properties**

Modulus @ 50% Elongation	902 psi	6.2 MPa
Modulus @ 100% Elongation	1853 psi	12.8 MPa
Tensile Strength	2,257 psi	15.6 MPa
Ultimate Elongation	123 %	
Hardness, Shore A	88 Durometer	
Specific Gravity	1.86 grams/cc	
Brittleness Temperature	-49 °F	-45 °C
TR-10 Temperature	-41 °F	-41 °C
Tear Resistance, Die B	98 ppi	17.2 kN/m
Tear Resistance, Die C	129 ppi	22.6 kN/m

Compression Set

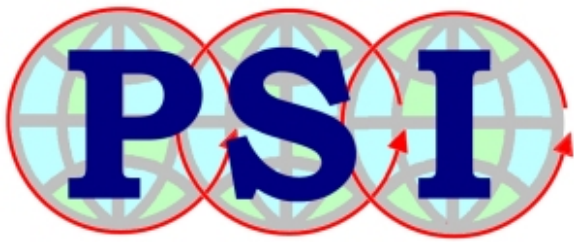
Plied: 22 hrs @ RT (73°F, 23°C)	16.2 %
Plied: 22 hrs @ 347°F (175°C)	7.8 %
Plied: 22 hrs @ 392°F (200°C)	9.3 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	- 12.6 %
Change - Elongation	+ 8.3 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 527°F (275°C)

Change - Tensile Strength	- 22.6 %
Change - Elongation	+ 76.1 %
Change - Hardness, Shore A	- 1



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Change - Hardness, Shore A	- 1
Change - Volume	+ 2.9 %

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

Change - Tensile Strength	- 33.4 %
Change - Elongation	- 19.3 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 5.0 %

ASTM OIL #1 (IRM 901): 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 10.1 %
Change - Elongation	+ 5.5 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.8 %

ASTM OIL #3 (IRM 903): 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 0.9 %
Change - Elongation	+ 8.3 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 1.0 %

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

Change - Tensile Strength	- 10.8 %
Change - Elongation	+ 1.8 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 6.6 %

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

Change - Tensile Strength	- 11.4 %
Change - Elongation	+ 0.9 %
Change - Hardness, Shore A	- 10
Change - Volume	+ 12.9 %