

Compound
8782
FLUORINATED HYDROCARBON
75 DUROMETER
BLACK COLOR

PRODUCT DATA SHEET

Compound 8782 is a 75 durometer black colored Viton® GF-S elastomer that is peroxide cured. It exhibits excellent resistance to a wide variety of chemicals including concentrated acids.

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

ASTM D2000 2 HK 820 A1-10 B37 B38 EF31 EO78 F15 Z1
4 HK 820 A1-11 B38 EF31 EO78 Z1
6 HK 820 A1-10 A1-11 B31 B38 EO88 F15 Z1

Z1 = 75 ± 5 Shore A Durometer



Original Properties

Modulus @ 100% Elongation	881 psi	6.1 MPa
Tensile Strength	2,743 psi	18.9 MPa
Ultimate Elongation	240 %	
Hardness, Shore A	77 Durometer	
Specific Gravity	1.92 grams/cc	
Brittleness Temperature	-33 °F	-36 °C
TR-10 Temperature	19 °F	-7 °C
Tear Resistance, Die B	135.0 ppi	23.6 kN/m
Tear Resistance, Die C	138.0 ppi	24.2 kN/m

Compression Set

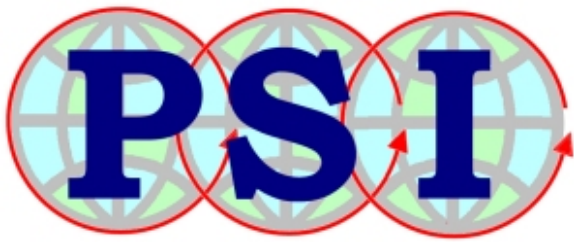
Plied: 22 hrs @ RT (73°F, 23°C)	11.5 %
Plied: 22 hrs @ 347°F (175°C)	9.5 %
Plied: 22 hrs @ 392°F (200°C)	10.8 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	+ 2.9 %
Change - Elongation	+ 13.6 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 527°F (275°C)

Change - Tensile Strength	+ 2.3 %
Change - Elongation	+ 27.1 %
Change - Hardness, Shore A	+ 1



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Change - Tensile Strength	- 13.7 %
Change - Elongation	- 12.3 %
Change - Hardness, Shore A	+ 2
Change - Volume	+ 0.3 %

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

Change - Tensile Strength	- 12.4 %
Change - Elongation	- 8.7 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.3 %

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

Change - Tensile Strength	+ 1.6 %
Change - Elongation	- 2.8 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 0.6 %

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

Change - Tensile Strength	- 6.4 %
Change - Elongation	+ 0.5 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 1.6 %

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

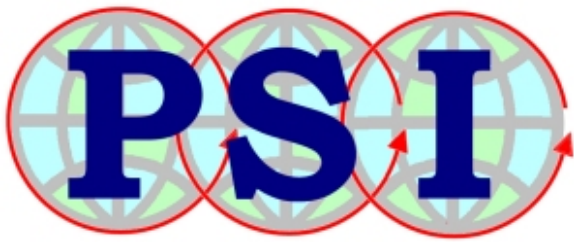
Change - Tensile Strength	- 11.7 %
Change - Elongation	+ 7.0 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 4.6 %

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

Change - Tensile Strength	- 12.4 %
Change - Elongation	+ 4.4 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 7.0 %

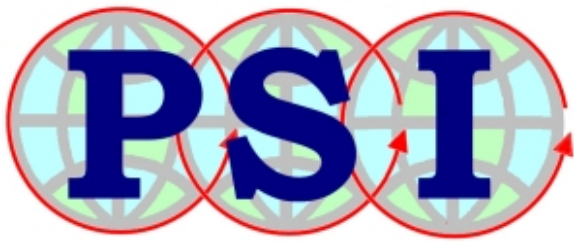
ETHANOL : AGED 168 hrs. @ RT (70°F, 23°C)

Change - Hardness, Shore A	- 1
Change - Volume	+ 0.8 %



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BLACK COLOR**PRODUCT DATA SHEET****85% EtOH/15% FUEL C : AGED 168 hrs. @ 70°F, 23°C**Change - Hardness, Shore A - 3
Change - Volume + 1.7 %**15% EtOH/85% FUEL C : AGED 168 hrs. @ 70°F, 23°C**Change - Hardness, Shore A - 4
Change - Volume + 4.3 %**METHANOL : Aged 168 hrs @ RT (73°F, 23°C)**Change - Hardness, Shore A - 4
Change - Volume + 2.9 %**50% MeOH/50% FUEL C : AGED 168 hrs. @ 70°F, 23°C**Change - Hardness, Shore A - 7
Change - Volume + 7.4 %**SODIUM HYDROXIDE (50%) : AGED 70 hrs @ RT (70°F)**Change - Hardness, Shore A 0
Change - Volume - 0.1 %**SODIUM HYDROXIDE (50%) : AGED 168 hrs @ RT (70°F)**Change - Tensile Strength + 2.0 %
Change - Elongation + 3.8 %
Change - Hardness, Shore A 0
Change - Volume 0.0 %**SODIUM HYDROXIDE (50%) : AGED 2000 hrs @ RT (70°F)**Change - Hardness, Shore A + 3
Change - Volume - 0.7 %**ETHANOL : AGED 600 hrs. @ RT (70°F, 23°C)**Change - Hardness, Shore A - 1
Change - Volume + 1.7 %**85% EtOH/15% FUEL C : Aged 600 hrs. @ 70°F, 23°C**Change - Hardness, Shore A - 3
Change - Volume + 3.3 %



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15% EtOH/85% FUEL C : Aged 600 hrs. @ 70°F, 23°C

Change - Hardness, Shore A - 5
Change - Volume + 8.0 %

METHANOL : AGED 600 hrs @ RT (73°F, 23°C)

Change - Hardness, Shore A - 4
Change - Volume + 4.7 %

50% MeOH/50% FUEL C : AGED 600 hrs. @ 70°F, 23°C

Change - Hardness, Shore A - 8
Change - Volume + 10.8 %

ETHANOL : AGED 1600 hrs. @ RT (70°F, 23°C)

Change - Hardness, Shore A - 2
Change - Volume + 2.8 %

85% EtOH/15% FUEL C : AGED 1600 hrs. @ 70°F, 23°

Change - Hardness, Shore A - 4
Change - Volume + 4.8 %

15% EtOH/85% FUEL C : AGED 1600 hrs. @ 70°F, 23°C

Change - Hardness, Shore A - 6
Change - Volume + 9.1 %

METHANOL : AGED 1600 hrs @ RT (73°F, 23°C)

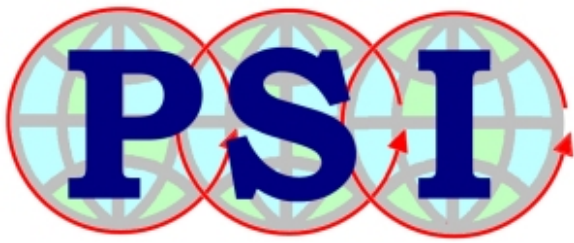
Change - Hardness, Shore A - 4
Change - Volume + 5.2 %

50% MeOH/50% FUEL C : AGED 1600 hrs. 70°F, 23°C

Change - Hardness, Shore A - 8
Change - Volume + 10.6 %

ETHANOL : AGED 70 hrs. @ RT (70°F, 23°C)

Change - Hardness, Shore A - 1
Change - Volume + 0.6 %



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Change - Hardness, Shore A	- 1
Change - Volume	+ 0.9 %

15% EtOH/85% FUEL C : AGED 70 hrs. @ 70°F, 23°C

Change - Hardness, Shore A	- 2
Change - Volume	+ 2.6 %

HYDROCHLORIC ACID 37% : AGED 168 hrs @ 70°C

Change - Tensile Strength	+ 1.2 %
Change - Elongation	+ 0.4 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 2.7 %

HYDROCHLORIC ACID 37% : AGED 2000 hrs @ RT (70°F)

Change - Hardness, Shore A	- 1
Change - Volume	+ 8.6 %

HYDROCHLORIC ACID 37% : AGED 70 hrs @ 70°F, 23°C

Change - Hardness, Shore A	0
Change - Volume	+ 1.8 %

METHANOL : AGED 70 hrs @ RT (73°F, 23°C)

Change - Hardness, Shore A	- 2
Change - Volume	+ 1.7 %

50% MeOH/50% FUEL C : Aged 70 hrs. @ 70°F, 23°C

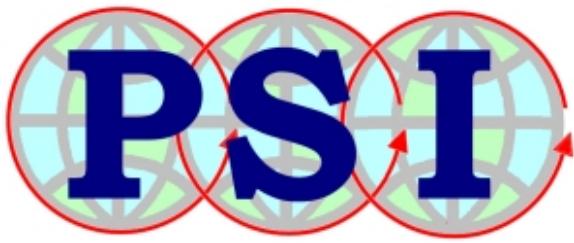
Change - Hardness, Shore A	- 5
Change - Volume	+ 4.5 %

CONCENTRATED NITRIC ACID : AGED 70 hrs @ 70°F

Change - Hardness, Shore A	0
Change - Volume	+ 2.7 %

CONCENTRATED NITRIC ACID : AGED 168 hrs @ 70°F

Change - Tensile Strength	- 4.0 %
Change - Elongation	+ 6.0 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 4.5 %



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Change - Hardness, Shore A	- 9
Change - Volume	+ 20.4 %

CONCENTRATED SULFURIC ACID : AGED 70 hrs @ 250 °F

Change - Tensile Strength	- 11.6 %
Change - Elongation	+ 9.5 %
Change - Hardness, Shore A	0
Change - Volume	+ 3.5 %

CONCENTRATED SULFURIC ACID : AGED 168 hrs @ 250°F

Change - Tensile Strength	- 19.3 %
Change - Elongation	+ 6.9 %
Change - Hardness, Shore A	0
Change - Volume	+ 4.2 %

CONCENTRATED SULFURIC ACID : AGED 480 hrs @ 250°F

Change - Hardness, Shore A	0
Change - Volume	+ 7.5 %

SODIUM HYPOCHLORITE : AGED 70 hrs @ 70°F

Change - Hardness, Shore A	0
Change - Volume	+ 0.1 %

SODIUM HYPOCHLORITE: AGED 168 hrs @ 70°F

Change - Tensile Strength	- 10.0 %
Change - Elongation	- 7.7 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 0.2 %

SODIUM HYPOCHLORITE: AGED 2000 hrs @ RT (70°F)

Change - Hardness, Shore A	0
Change - Volume	0.0 %