

Compound

25801**TETRAFLUOROETHYLENE -
PROPYLENE-BLACK-80 DUROMETER
ACIDS/ALKALI RESISTANT****PRODUCT DATA SHEET**

Compound 25801 is an 80 durometer black colored TFE/P copolymer elastomer. It has the unique advantage of being resistant to extreme heat coupled with excellent resistance to both acids and alkalies. It performs well in both petroleum based oils and phosphate ester brake fluids. It is also recommended for use in water, steam, alcohols and a variety of other chemical environments. The operating temperature for this compound is 10 F - 450 F.

This compound has the following physical properties:

Original Properties

Modulus @ 100% Elongation	894 psi	6.2 MPa
Tensile Strength	1293 psi	8.9 MPa
Ultimate Elongation	253 %	
Hardness, Shore A	85 Durometer	
Specific Gravity	1.60 grams/cc	
Brittleness Temperature	2 °F	-17 °C
Tear Resistance, Die B	252 ppi	44.1 kN/m

Compression Set

Plied: 22 hrs @ 347°F (175°C)	39.9 %
Plied: 22 hrs @ 392°F (200°C)	39.9 %
Plied: 70 hrs @ 392°F (200°C)	40.5 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	+ 12.4 %
Change - Elongation	+ 1.6 %
Change - Hardness, Shore A	+ 5

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

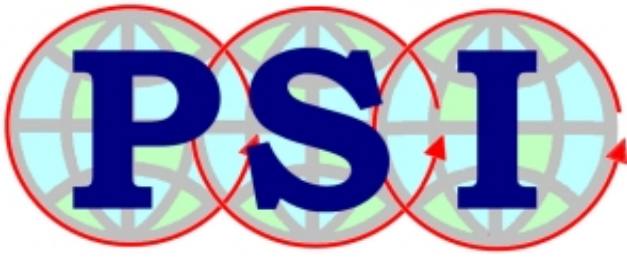
Change - Hardness, Shore A	- 1
Change - Volume	+ 3.6 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 7.4 %
Change - Elongation	+ 5.9 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.5 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 11.9 %
Change - Elongation	+ 9.5 %
Change - Hardness, Shore A	0
Change - Volume	+ 11.7 %



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25801**TETRAFLUOROETHYLENE -
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ACIDS/ALKALI RESISTANT****PRODUCT DATA SHEET****ETHANOL: Aged 168 hrs. @ RT (70°F, 23°C)**

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

85% EtOH/15% FUEL C:Aged 168 hrs. @ RT (70°F, 23°C)

Change - Hardness, Shore A	- 7
Change - Volume	+ 4.5 %

METHANOL: Aged 168 hrs @ RT (73°F, 23°C)

Change - Hardness, Shore A	- 5
Change - Volume	+ 1.4 %

ETHANOL: Aged 600 hrs. @ RT (70°F, 23°C)

Change - Hardness, Shore A	- 1
Change - Volume	+ 1.5 %

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

Change - Hardness, Shore A	- 9
Change - Volume	+ 8.2 %

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

Change - Hardness, Shore A	- 2
Change - Volume	+ 2.4 %

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

Change - Hardness, Shore A	- 2
Change - Volume	+ 2.3 %

85% EtOH/15% FUEL C:Aged 1600 hrs. @ RT (70°F, 23°)

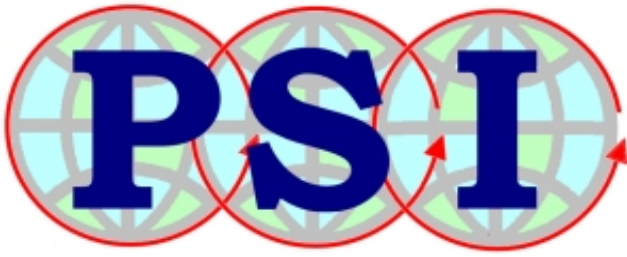
Change - Hardness, Shore A	- 10
Change - Volume	+ 10.0 %

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

Change - Hardness, Shore A	- 2
Change - Volume	+ 2.9 %

ATF: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 16.4 %
Change - Elongation	+ 6.3 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 6.3 %



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Change - Tensile Strength	- 31.4 %
Change - Elongation	+ 6.7 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 6.0 %

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

Change - Hardness, Shore A	- 1
Change - Volume	+ 0.5 %

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

Change - Hardness, Shore A	- 6
Change - Volume	+ 3.0 %

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

Change - Tensile Strength	+ 3.2 %
Change - Elongation	- 4.3 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.8 %

METHYL ETHYL KETONE: Aged 70 hrs @ RT (70°F, 23°C)

Change - Tensile Strength	- 75.3 %
Change - Elongation	- 53.3 %
Change - Hardness, Shore A	- 30
Change - Volume	+ 79.3 %

NITRIC ACID: Aged 70 hrs @ RT (70°F, 23°C)

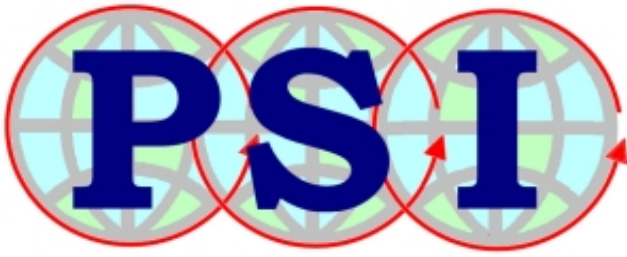
Change - Tensile Strength	+ 28.8 %
Change - Elongation	- 1.2 %
Change - Hardness, Shore A	+ 2
Change - Volume	+ 5.4 %

SULFURIC ACID: Aged 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 13.9 %
Change - Elongation	- 41.1 %
Change - Hardness, Shore A	+ 4
Change - Volume	+ 9.0 %

SODIUM HYPOCHLORITE: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 3.2 %
Change - Elongation	+ 9.1 %
Change - Hardness, Shore A	+ 5
Change - Volume	+ 0.8 %



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SODIUM HYDROXIDE: Aged 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 4.0 %
Change - Elongation	+ 6.7 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.1 %