

Compound

**35815**POLYURETHANE  
80 DUROMETER  
BLACK COLOR**PRODUCT DATA SHEET**

Compound 35815 is an 80 durometer black colored general purpose polyUrethane elastomer. It has good physicals. It exhibits good resistance to aliphatic and aromatic fuels.

This compound has the following physical properties:

**Original Properties**

Modulus @ 100% Elongation	1067 psi	7.4 MPa
Tensile Strength	3147 psi	21.7 MPa
Ultimate Elongation	420 %	
Hardness, Shore A	83 Durometer	
Specific Gravity	1.38 grams/cc	
Brittleness Temperature	-15 °F	-26 °C
Tear Resistance, Die B	391 ppi	68.5 kN/m
Tear Resistance, Die C	380 ppi	66.5 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	90.8 %
Plied: 22 hrs @ 212°F (100°C)	84.4 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	- 2.6 %
Change - Elongation	- 47.6 %
Change - Hardness, Shore A	+ 5

**HEAT AGED: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	- 9.9 %
Change - Elongation	- 52.4 %
Change - Hardness, Shore A	+ 5

**HEAT AGED: 70 hrs @ 257°F (125°C) Test Tube Method**

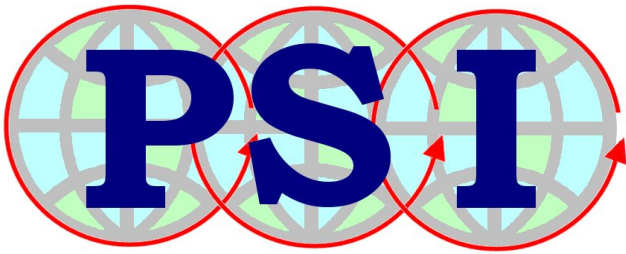
Change - Tensile Strength	- 9.9 %
Change - Elongation	- 52.4 %
Change - Hardness, Shore A	+ 5

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

Change - Hardness, Shore A	- 21
Change - Volume	+ 20.4 %

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

Change - Tensile Strength	+ 4.5 %
Change - Elongation	- 11.9 %
Change - Hardness, Shore A	+ 3
Change - Volume	0.0 %



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

Change - Tensile Strength	- 3.1 %
Change - Elongation	- 11.9 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 5.5 %

**ASTM OIL #1: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	- 4.3 %
Change - Elongation	- 38.1 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 2.0 %

**ASTM OIL #3: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	- 5.1 %
Change - Elongation	- 38.1 %
Change - Hardness, Shore A	+ 4
Change - Volume	+ 0.3 %