



Compound

**55604****HIGHLY SATUR. NITRILE  
60 DUROMETER  
BLACK COLOR****PRODUCT DATA SHEET**

Compound 55604 is a 60 durometer black colored highly saturated nitrile ( HSN ) elastomer. It exhibits good resistance to compression set and petroleum based oils. It has good physicals.

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

ASTM D2000 2 BF 625 B14 B34 EO14 EO34 F19

2 BG 625 B14 B34 EA14 EF11 EF21 EO14 EO34 F17

3 BG 620 B14 EO14 F19

4 BG 620 B14 EO14 F19

5 BG 620 A14 B14 B34 EO14 EO34 F19

2 CH 625 A25 B14 B34 EO15 EO35 F17

3 CH 625 A25 B14 B34 EO16 EO36

5 CH 615 A25 B14 B34 F14

6 CH 615 A25 B14 B34 EO36 F17

**Original Properties**

Modulus @ 100% Elongation	268 psi	1.9 MPa
Tensile Strength	2510 psi	17.3 MPa
Ultimate Elongation	432 %	
Hardness, Shore A	62 Durometer	
Specific Gravity	1.14 grams/cc	
Brittleness Temperature	< -84 °F	< -64 °C
Tear Resistance, Die B	101 ppi	17.7 kN/m
Tear Resistance, Die C	163 ppi	28.5 kN/m

**Compression Set**

Solid: 22 hrs @ 212°F (100°C)	11.6 %
Solid: 22 hrs @ 257°F (125°C)	13.7 %
Solid: 70 hrs @ 212°F (100°C)	16.4 %
Plied: 22 hrs @ 212°F (100°C)	8.7 %
Plied: 22 hrs @ 257°F (125°C)	15.1 %
Plied: 70 hrs @ 212°F (100°C)	17.0 %

**HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 16.5 %
Change - Elongation	+ 3.7 %
Change - Hardness, Shore A	+ 3

**HEAT AGED: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 7.6 %
Change - Elongation	- 4.2 %
Change - Hardness, Shore A	+ 7



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Change - Hardness, Shore A	- 2
Change - Volume	+ 4.5 %

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

Change - Tensile Strength	- 11.2 %
Change - Elongation	- 6.5 %
Change - Hardness, Shore A	0
Change - Volume	+ 2.4 %

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

Change - Tensile Strength	- 56.4 %
Change - Elongation	- 47.9 %
Change - Hardness, Shore A	- 10
Change - Volume	+ 38.0 %

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

Change - Tensile Strength	- 64.8 %
Change - Elongation	- 61.3 %
Change - Hardness, Shore A	- 12
Change - Volume	+ 66.4 %

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

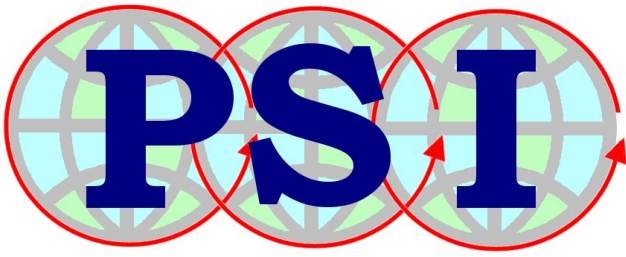
Change - Tensile Strength	+ 14.7 %
Change - Elongation	+ 5.8 %
Change - Hardness, Shore A	0
Change - Volume	- 2.9 %

**ASTM OIL #1: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 10.1 %
Change - Elongation	+ 0.5 %
Change - Hardness, Shore A	0
Change - Volume	- 3.1 %

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

Change - Tensile Strength	+ 11.3 %
Change - Elongation	+ 2.5 %
Change - Hardness, Shore A	+ 2
Change - Volume	+ 3.4 %



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

Change - Tensile Strength	+ 14.7 %
Change - Elongation	+ 5.8 %
Change - Hardness, Shore A	0
Change - Volume	- 2.9 %

**ASTM OIL #3: 70 hrs @ 257°F (125°C)**

Change - Tensile Strength	+ 1.8 %
Change - Elongation	- 0.2 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 15.4 %

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

Change - Tensile Strength	- 2.6 %
Change - Elongation	+ 0.2 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 14.5 %