Compound

55804

HIGHLY SATURATED NITRILE
80 DUROMETER
BLACK - HEAT RESISTANT

PRODUCT DATA SHEET

Compound 55804 is an 80 durometer black colored Highly Saturated Nitrile elastomer, it is formulated for high temperature applications.It exhibits good resistance to petroleum based oils and sour gasoline.

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

ASTM D2000 2 BF 820 B14 B34 EO14 EO34

3 BG 820 B14 EO14
4 BG 820 A14 B14 EO14
6 BG 820 A14 B14 B34 EO14 EO34 F17
7 BG 820 B14 EO14 EO34 EF11 EF21 EA14 F16

3 CH 820 A25 B14 B34 EO16 EO36
4 CH 820 A25 B14 EO15 EO35 F16
5 CH 820 A25 B14 B34 F14
6 CH 820 A25 B14 B34 F17

4 DH 829 A26 B36 EO36 F17
3 DH 815 A26 B16 B36 EO36 F13
5 DH 808 A26 B16 EO36 F13

Original Properties

Modulus @ 100% Elongation	1407	psi	9.7	MPa
Tensile Strength	3233	psi	22.3	MPa
Ultimate Elongation	233	%		
Hardness, Shore A	82	Durometer		
Specific Gravity	1.17	grams/cc		
Brittleness Temperature	-66	°F	-54	°C
Tear Resistance, Die B	266	ppi	46.6	kN/m
Tear Resistance, Die C	235	ppi	41.2	kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	8.6	%
Solid: 22 hrs @ 257°F (125°C)	10.6	%
Solid: 22 hrs @ 302°F (150°C)	13.9	%
Plied: 22 hrs @ 212°F (100°C)	12.4	%
Plied: 22 hrs @ 257°F (125°C)	16.1	%
Plied: 22 hrs @ 302°F (150°C)	25.6	%

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 1.7 %
Change - Elongation	- 10.7 %
Change - Hardness, Shore A	+ 1

Presure Seals, Inc.
310 Nutmeg Road South
South Windsor, CT 06074
Phone: (860) 282-9100
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Toll: (877) PSI-SEAL
www.PressureSeal.com

HEAT AGED: 70 hrs @ 257°F (125°C)	
Change - Tensile Strength	+ 2.5 %
Change - Elongation	- 7.7 %
Change - Hardness, Shore A	+ 1

HEAT AGED: 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	+ 9.9 %
Change - Elongation	- 14.2 %
Change - Hardness, Shore A	+ 5

DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)	
Change - Hardness, Shore A	- 2
Change - Volume	+ 0.2 %

ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 3.7 %
Change - Elongation	- 7.3 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 1.8 %

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 36.6 %
Change - Elongation	- 40.3 %
Change - Hardness, Shore A	- 12
Change - Volume	+ 33.1 %

ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 42.4 %
Change - Elongation	- 46.8 %
Change - Hardness, Shore A	- 15
Change - Volume	+ 53.3 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)	
Change - Tensile Strength	+ 1.1 %
Change - Elongation	- 7.7 %
Change - Hardness, Shore A	0
Change - Volume	- 1.6 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)	
Change - Tensile Strength	+ 4.0 %
Change - Elongation	+ 0.9 %
Change - Hardness, Shore A	- 2
Change - Volume	- 1.3 %

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ASTM OIL #1: 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	- 10.5 %
Change - Elongation	- 15.5 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 14.5 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)	
Change - Tensile Strength	- 2.8 %
Change - Elongation	- 6.9 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 12.9 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)	
Change - Tensile Strength	- 10.5 %
Change - Elongation	- 15.5 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 14.5 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	- 8.0 %
Change - Elongation	- 12.4 %
Change - Hardness, Shore A	- 7
Change - Volume	+ 15.5 %

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