Compound

5909

NITRILE - BUTADIENE
90 DUROMETER
BLACK - U.L. APPROVED

PRODUCT DATA SHEET

Compound 5909 is a 90 durometer black colored high quality Buna N elastomer. It is on the approved list of the Underwriters Laboratories for use with kersone, naptha, No. 1 through No. fuel 6 oils, LP-Gas, natural (city) and manfactured gas at temperatures of -40 to 125.

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

ASTM D2000

6 BG 915 A14 B14 B34 EO14 EO34
7 BG 915 B14 EO14 EO34 EF11 EF21 EA14

4 BK 915 A24 B14 B34 EO14 EO34 EF11 EF21

3 CH 915 A25 B14 B34 EO16 EO36
4 CH 915 A25 B14 EO15 EO35 EF31
5 CH 915 B14 B34 EO36 EF31 F14
6 CH 915 B14 B34 EO36 EF31

SAE J515a Type I

Original Properties

Modulus @ 100% Elongation	1196	psi	8.2	MPa
Tensile Strength	1538	psi	10.6	MPa
Ultimate Elongation	170	%		
Hardness, Shore A	87	Durometer		
Specific Gravity	1.37	grams/cc		
Brittleness Temperature	-20	°F	-29	°C
Tear Resistance, Die B	234	ppi	41.0	kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	9.6 %
Solid: 22 hrs @ 257°F (125°C)	19.3 %
Solid: 70 hrs @ 212°F (100°C)	19.3 %
Plied: 22 hrs @ 212°F (100°C)	16.5 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 9.4 %
Change - Elongation	- 23.5 %
Change - Hardness, Shore A	+ 4

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 3.1 %
Change - Elongation	- 47.1 %
Change - Hardness, Shore A	+ 5

Presure Seals, Inc.
310 Nutmeg Road South
South Windsor, CT 06074
Phone: (860) 282-9100
Fax: (860) 282-9001
Toll: (877) PSI-SEAL
www.PressureSeal.com

HEAT AGED: 70 hrs @ 257°F (125°C) Test Tube Method	
Change - Tensile Strength	+ 3.1 %
Change - Elongation	- 47.1 %
Change - Hardness, Shore A	+ 5

DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)	
Change - Hardness, Shore A	- 2
Change - Volume	+ 4.8 %

ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 6.2 %
Change - Elongation	- 5.9 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 1.1 %

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 29.1 %
Change - Elongation	- 35.3 %
Change - Hardness, Shore A	- 15
Change - Volume	+ 18.9 %

ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 34.7 %
Change - Elongation	- 41.2 %
Change - Hardness, Shore A	- 20
Change - Volume	+ 35.0 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)	
Change - Tensile Strength	+ 13.9 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 4.8 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)	
Change - Tensile Strength	+ 10.6 %
Change - Elongation	- 23.5 %
Change - Hardness, Shore A	+ 5
Change - Volume	- 5.2 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	+ 4.6 %
Change - Elongation	- 29.4 %
Change - Hardness, Shore A	+ 6
Change - Volume	- 5.7 %

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ASTM OIL #3: 70 hrs @ 212°F (100°C)	
Change - Tensile Strength	+ 8.6 %
Change - Elongation	- 5.9 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 4.8 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)	
Change - Tensile Strength	+ 12.5 %
Change - Elongation	- 17.6 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 6.1 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	+ 9.5 %
Change - Elongation	- 23.5 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 6.4 %

Tear Resistance, Method D 624, Die B	
Tear Resistance	234.0 ppi

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