



Compound

5939NITRILE - BUTADIENE
90 DUROMETER
BLACK COLOR**PRODUCT DATA SHEET**

Compound 5939 is a 90 durometer black colored general purpose Buna N elastomer. It exhibits very good resistance to petroleum based oils, aliphatic and aromatic fuels. Its high durometer coupled with its high modulus at low elongation makes it ideally suited for use as extrusion resistance devices such as "KURV - BAKS".

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 B14 B34 EF11 EF21 EO34

Original Properties

Modulus @ 100% Elongation	2330 psi	16.1 MPa
Tensile Strength	2543 psi	17.5 MPa
Ultimate Elongation	113 %	
Hardness, Shore A	90 Durometer	
Specific Gravity	1.30 grams/cc	
Brittleness Temperature	-18 °F	-28 °C
Tear Resistance, Die B	335 ppi	58.7 kN/m
Tear Resistance, Die C	198 ppi	34.7 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	9.4 %
Solid: 22 hrs @ 257°F (125°C)	14.9 %
Solid: 70 hrs @ 212°F (100°C)	42.5 %
Plied: 22 hrs @ 212°F (100°C)	24.7 %
Plied: 22 hrs @ 257°F (125°C)	27.6 %
Plied: 70 hrs @ 212°F (100°C)	38.3 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 7.1 %
Change - Elongation	- 33.6 %
Change - Hardness, Shore A	+ 3

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 7.8 %
Change - Elongation	- 59.3 %
Change - Hardness, Shore A	+ 5

HEAT AGED: 70 hrs @ 212°F (100°C) Test Tube

Change - Tensile Strength	- 7.1 %
Change - Elongation	- 33.6 %
Change - Hardness, Shore A	+ 3



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Change - Tensile Strength	- 7.8 %
Change - Elongation	- 59.3 %
Change - Hardness, Shore A	+ 5

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

Change - Hardness, Shore A	- 1
Change - Volume	+ 2.4 %

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

Change - Tensile Strength	+ 3.1 %
Change - Elongation	+ 3.5 %
Change - Hardness, Shore A	- 2
Change - Volume	- 0.5 %

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

Change - Tensile Strength	- 10.8 %
Change - Elongation	- 12.4 %
Change - Hardness, Shore A	- 8
Change - Volume	+ 15.7 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 6.7 %
Change - Elongation	- 8.0 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 7.1 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 7.6 %
Change - Elongation	+ 17.7 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 2.3 %