



Compound

55857**HIGHLY SATURATED NITRILE
75 DUROMETER - BLACK COLOR
SELF LUBRICATING****PRODUCT DATA SHEET**

Compound 55857 is a 75 durometer black colored Highly Saturated Nitrile, formulated using an organic lubricant to provide self lubrication for improved break-away and reduced running friction. This material has been compounded for enhanced abrasion resistance. It exhibits good resistance to heat, compression set, and petroleum based oils.

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

ASTM D2000 2 BF 820 B14 B34 EO14 EO34 F19
3 BG 830 B14 EO14 F19
4 BG 830 A14 B14 EO14 F19
6 BG 820 A14 B14 B34 EO14 EO34 F17
7 BG 820 B14 EA14 EF21 F16
4 BK 820 A24 B14 B34
3 CH 820 A25 B14 B34 EO16
4 CH 820 A25 B14 EO15 F16
5 CH 820 A25 B14 B34 F14
6 CH 820 A25 B14 B34 F17
4 DH 830 A26 B36 EO16 F17
3 DH 815 A26 B16 B36 EO16 F13
5 DH 808 A26 B16 EO16 F13

Original Properties

Modulus @ 100% Elongation	528 psi	3.6 MPa
Tensile Strength	3382 psi	23.3 MPa
Ultimate Elongation	539 %	
Hardness, Shore A	75 Durometer	
Specific Gravity	1.23 grams/cc	
Brittleness Temperature	< -80 °F	< -62 °C
Tear Resistance, Die B	208 ppi	36.4 kN/m
Tear Resistance, Die C	257 ppi	45.0 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	10.9 %
Solid: 22 hrs @ 257°F (125°C)	10.0 %
Solid: 22 hrs @ 302°F (150°C)	13.4 %
Solid: 70 hrs @ 212°F (100°C)	13.2 %
Plied: 22 hrs @ 212°F (100°C)	15.1 %
Plied: 22 hrs @ 257°F (125°C)	12.4 %
Plied: 22 hrs @ 302°F (150°C)	17.4 %
Plied: 70 hrs @ 212°F (100°C)	14.5 %



Compound

55857**HIGHLY SATURATED NITRILE
75 DUROMETER - BLACK COLOR
SELF LUBRICATING****PRODUCT DATA SHEET****HEAT AGED: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength	+ 5.8 %
Change - Elongation	+ 6.5 %
Change - Hardness, Shore A	+ 2

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 2.3 %
Change - Elongation	- 2.8 %
Change - Hardness, Shore A	+ 5

HEAT AGED: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 0.5 %
Change - Elongation	+ 4.1 %
Change - Hardness, Shore A	+ 6

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

Change - Tensile Strength	+ 5.8 %
Change - Elongation	+ 6.5 %
Change - Hardness, Shore A	+ 2

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

Change - Tensile Strength	- 2.3 %
Change - Elongation	- 2.8 %
Change - Hardness, Shore A	+ 5

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

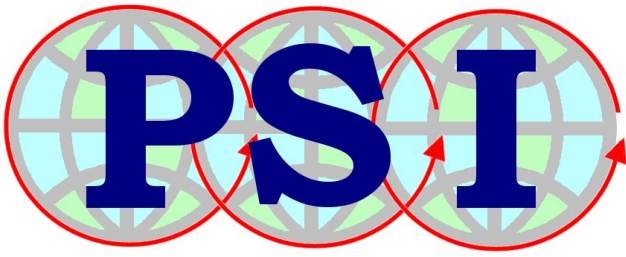
Change - Hardness, Shore A	- 2
Change - Volume	+ 0.8 %

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

Change - Tensile Strength	- 7.5 %
Change - Elongation	- 34.7 %
Change - Hardness, Shore A	- 1
Change - Volume	+ 3.0 %

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

Change - Tensile Strength	- 47.3 %
Change - Elongation	- 56.6 %
Change - Hardness, Shore A	- 11
Change - Volume	+ 34.5 %



Compound

55857HIGHLY SATURATED NITRILE
75 DUROMETER - BLACK COLOR
SELF LUBRICATING**PRODUCT DATA SHEET****ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)**

Change - Tensile Strength	- 62.9 %
Change - Elongation	- 54.2 %
Change - Hardness, Shore A	- 15
Change - Volume	+ 56.3 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 8.5 %
Change - Elongation	- 32.8 %
Change - Hardness, Shore A	0
Change - Volume	- 2.0 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 6.7 %
Change - Elongation	- 28.8 %
Change - Hardness, Shore A	0
Change - Volume	- 2.5 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 9.8 %
Change - Elongation	- 26.5 %
Change - Hardness, Shore A	0
Change - Volume	- 2.6 %

ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 2.5 %
Change - Elongation	- 27.6 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 8.6 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	- 8.2 %
Change - Elongation	- 41.6 %
Change - Hardness, Shore A	- 3
Change - Volume	+ 12.8 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	- 29.6 %
Change - Elongation	- 44.5 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 12.0 %