



Compound

55788**HIGHLY SATURATED NITRILE
70 DUROMETER - BLACK
CONDUCT./ABRAS.RESIST>****PRODUCT DATA SHEET**

Compound 55788 is a 70 durometer black colored highly saturated nitrile (HSN) elastomer, it is specifically formulated to be electrically conductive. It exhibits good resistance to abrasion and petroleum based oils.

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

ASTM D2000 2 BF 725 EO14 EO34 F19
3 BG 730 B14 F19
4 BG 730 A14 B14 F19
2 BG 725 EA14 EF11 EF21 EO14 EO34 F17
5 BG 720 A14 EO14 EO34 F17
2 CH 725 A25 EO35 F17
3 CH 725 A25 EO16 EO36
5 CH 720 A25 B14 F14
6 CH 720 A15 EO36 F17

Original Properties

Modulus @ 100% Elongation	490 psi	3.4 MPa
Tensile Strength	3968 psi	27.4 MPa
Ultimate Elongation	529 %	
Hardness, Shore A	75 Durometer	
Specific Gravity	1.10 grams/cc	
Brittleness Temperature	-72 °F	-58 °C
Tear Resistance, Die B	367 ppi	64.3 kN/m
Tear Resistance, Die C	310 ppi	54.3 kN/m

Compression Set

Solid: 22 hrs @ 212°F (100°C)	28.2 %
Solid: 70 hrs @ 212°F (100°C)	33.6 %
Plied: 22 hrs @ 212°F (100°C)	40.4 %
Plied: 22 hrs @ 302°F (150°C)	59.5 %
Plied: 70 hrs @ 212°F (100°C)	44.7 %

HEAT AGED: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	+ 12.3 %
Change - Elongation	+ 2.7 %
Change - Hardness, Shore A	+ 5

HEAT AGED: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 14.0 %
Change - Elongation	- 5.1 %
Change - Hardness, Shore A	+ 9



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Change - Tensile Strength	+ 21.8 %
Change - Elongation	- 21.4 %
Change - Hardness, Shore A	+ 10

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

Change - Hardness, Shore A	0
Change - Volume	- 0.3 %

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

Change - Tensile Strength	+ 1.6 %
Change - Elongation	0.0 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.6 %

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

Change - Tensile Strength	- 45.0 %
Change - Elongation	- 34.0 %
Change - Hardness, Shore A	- 14
Change - Volume	+ 31.4 %

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

Change - Tensile Strength	- 65.4 %
Change - Elongation	- 54.3 %
Change - Hardness, Shore A	- 19
Change - Volume	+ 55.0 %

ASTM OIL #1: 70 hrs @ 212°F (100°C)

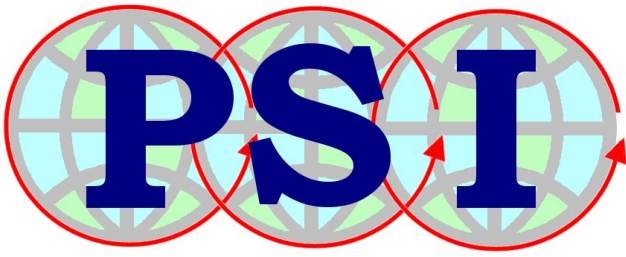
Change - Tensile Strength	+ 14.7 %
Change - Elongation	+ 1.7 %
Change - Hardness, Shore A	+ 3
Change - Volume	- 5.5 %

ASTM OIL #1: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 12.5 %
Change - Elongation	- 1.1 %
Change - Hardness, Shore A	+ 4
Change - Volume	- 5.2 %

ASTM OIL #1: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 5.4 %
Change - Elongation	- 3.2 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 14.3 %



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ASTM OIL #3: 70 hrs @ 212°F (100°C)

Change - Tensile Strength	- 2.6 %
Change - Elongation	- 0.6 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 10.9 %

ASTM OIL #3: 70 hrs @ 257°F (125°C)

Change - Tensile Strength	+ 0.5 %
Change - Elongation	+ 3.0 %
Change - Hardness, Shore A	- 5
Change - Volume	+ 12.2 %

ASTM OIL #3: 70 hrs @ 302°F (150°C)

Change - Tensile Strength	+ 5.4 %
Change - Elongation	- 3.2 %
Change - Hardness, Shore A	- 4
Change - Volume	+ 14.3 %