PIONEER WESTON

N1 Material Datasheet

N-70-18

Pioneer Weston's core NBR compound, designated N1, formulated through 90 years of development for rotary oil seal applications.

Colour	Dynamics	Oil Compatibility
Black	V.Good	V. Good

Operating Temperature
-35 to +110°C*

Storage Stability
7 Years (ISO 2230)

*Excursions to (Synthetic Oil 80°C Max.)

ASTM D2000 M2BG 710 A14 B14 EA14 EF11 EF21 EO14 EO34

Property	Test Standard	Units	Specification [Value]
Hardness	ASTM D2240	Shore A	70±5 [72]
Tensile strength	ASTM D412	MPa	10 Min. [13.85]
Elongation at break	ASTM D412	%	250 Min. [403]
A14	**HEAT AGEING 70H AT 100°C**		
Hardness change	ASTM D573	Shore A	±15 [+2]
Tensile strength change		%	±30 [-1]
Elongation change		%	-50 Max. [-25]
B14	**COMPRESSION SET 22H AT 100°C**		
Compression set	ASTM D395 Method B	%	25 Max. [19]
EA14	**RESISTANCE TO WATER 70H AT 100°C**		
Hardness change	ASTM D471	Shore A	±10 [+3]
Volume change		%	±15 [+5.4]
EF11	**RESISTANCE TO FUEL A 70H AT 23°C**		
Hardness change	ASTM D471	Shore A	±10 [-8]
Tensile strength change		%	-25 Max. [-17]
Elongation change		%	-25 Max. [-18]
Volume change		%	-5 to +10 [+11.9]
EF21	**RESISTANCE TO FUEL B 70H AT 23°C**		
Hardness change	ASTM D471	Shore A	-30 to 0 [-16]
Tensile strength change		%	-60 Max. [-45]
Elongation change		%	-60 Max. [-46]
Volume change		%	0 to +40 [+38]
EO14	**IRM 901 OIL RESISTANCE 70H AT 100°C**		
Hardness change	ASTM D471	Shore A	-5 to +10 [+4]
Tensile strength change		%	-25 Max. [+11]
Elongation change		%	-45 Max. [-22]
Volume change		%	-10 to +5 [-5.3]
EO34	**IRM 903 OIL RESISTANCE 70H AT 100°C**		
Hardness change	ASTM D471	Shore A	-10 to +5 [-7]
Tensile strength change		%	-45 Max. [-1]
Elongation change		%	-45 Max. [-23]
Volume change		%	0 to +25 [+12.1]

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