



INGESE

LABORATORY REPORT

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E-07-D

Date:Jun/09/2023

MATERIAL : NITRILE

COMPOUND : N90

SPEC. : ASTM D2000 M2BG910 A14 B14 EA14 EF11 EF21 EO14 EO34

COLOR : BLACK

Original Physical Properties

Hardness, (Shore A) (ASTM D2240-15)

Requirements

90±5

Results

87

Tensile Strength, psi(MPa) (ASTM D412-16)

1450(10)(min)

2317(15.98)

Elongation, (%) (ASTM D412-16)

100(min)

133

Modulus at 100%, psi(MPa) (ASTM D412-16)

1899(13.10)

Density, (Mg/m³) (CNS 5341-96, Method A)

1.37

A14 Heat Age, 70 Hrs @ 100 °C (ASTM D573-04)

Hardness Change, pts.

±15

+2

Tensile Strength Change, %

±30

-3

Elongation Change, %

-50(max)

-20

Weight Change, %

-0.6

B14 Compression Set, 22 Hrs @ 100 °C (ASTM D395-18, Method B)

25%(button)(max)

6.3

EA14 Water resistance, 70 Hrs @ 100 °C (ASTM D471-16a)

Hardness Change, pts.

±10

-1

Tensile Strength Change, %

-3

Elongation Change, %

-15

Volume Change, %

±15

+4.8

EF11 ASTM Fuel A Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)

Hardness Change, pts.

±10

+1

Tensile Strength Change, %

-25(max)

-7

Elongation Change, %

-25(max)

-10

Volume Change, %

-5~+10

+0.9

EF21 ASTM Fuel B Resistance, 70 Hrs @ 23 °C (ASTM D471-16a)

Hardness Change, pts.

-30~0

-15

Tensile Strength Change, %

-60(max)

-36

Elongation Change, %

-60(max)

-34

Volume Change, %

0~+40

+20.9



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MATERIAL : NITRILO

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SPEC. : ASTM D2000 M2BG910 A14 B14 EA14 EF11 EF21 EO14 EO34

COLOR : BLACK

	<u>Requirements</u>	<u>Results</u>
<u>EO14 IRM 901 Oil, 70 Hrs @ 100 °C (ASTM D471-16a)</u>		
Hardness Change, pts.	-5~+10	+2
Tensile Strength Change, %	-25(max)	-6
Elongation Change, %	-45(max)	-18
Volume Change, %	-10~+5	-2.5
<u>EO34 IRM 903 Oil, 70 Hrs @ 100 °C (ASTM D471-16a)</u>		
Hardness Change, pts.	-10~+5	-4
Tensile Strength Change, %	-45(max)	-8
Elongation Change, %	-45(max)	-23
Volume Change, %	0~+25	+4.8

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AUDIT Pei-Ling Weng
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REPORT Pei-Ling Weng
(Laboratory Specialist)