

Data Sheet: HNBR90 AED LT

MATERIAL: HYDROGENATED NITRILE 90 SHORE
AED LOW TEMPERATURE – PEROXIDE CURED
NORSOK M710 EDITION 3 & – ISO 23936-2
(RAPID GAS DECOMPRESSION RESISTANCE)

COLOUR: BLACK

GENERAL SERVICE TEMPERATURE RANGE: -40°C to +150°C (static)
-35°C to +150°C (dynamic)

MATERIAL :	HNBR	E-07-D
SPEC. :	ASTM D2000 M2DH920 A26 B16 B36 EO16 F17 Z1	Date:Jan/31/2019
COLOUR :	BLACK	

<u>Original Physical Properties</u>	<u>Requirement</u>	<u>Results</u>
Hardness,(shore A) (ASTM D2240-15 ^{e1})	90±5	89
Tensile Strength,psi(MPa) (ASTM D412-16)	2900(20)(min)	3753(25.88)
Elongation,(%) (ASTM D412-16)	100(min)	197
Modulus at 100%,psi(MPa) (ASTM D412-16)		2407(16.6)
Density,(Mg/m ³) (CNS 5341-96,Method A)		1.36

A26 Heat Age, 70 Hrs @ 150°C (ASTM D865-11)

Hardness Change, pts.	+10(max)	+4
Tensile Strength Change, %	-25(max)	+3
Elongation Change, %	-30(max)	-15
Weight Change, %		+1.0

B16 Compression set, 22 Hrs @ 150 °C (ASTM D395-16^{e1},Method B)

30%(button)(max)	18.3
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B36 Compression set, 22 Hrs @ 150 °C (ASTM D395-16^{e1},Method B)

50%(plied)(max)	28.6
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EO16 IRM 901 Oil, 70 Hrs @ 150 °C (ASTM D471-16a)

Hardness Change, pts.	-5~+10	-3
Tensile Strength Change, %	-20(max)	-10
Elongation Change, %	-30(max)	-25
Volume Change, %	±5	+3.5

F17 Low-Temperature Brittleness Point Test,3 minute at -40 °C (ASTM D2137-11, Method A)

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Sample type: T-50

Coolant : Isopropyl alcohol

Low Temperature Property

no crack

pass

The above test results are based on test slabs / buttons. The results from the actual parts may be different.

Issue Date: 31/01/19



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