

LABORATORY REPORT

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E-07-D

Date: Aug/20/2020

MATERIAL : ETHYLENE PROPYLENE
 COMPOUND : E6083AA
 SPEC. : ASTM D2000 M2CA610 A25 B44 B35 EA14 F19 G11 G21 Z1 Z2 Z3 Z4
 Z1= WRAS CERTIFICATION
 Z2= NSF 61 CERTIFICATION
 Z3=PEROXIDE CURED
 Z4=Service Temperature -55°C ~ +125°C
 COLOR : BLACK

<u>Original Physical Properties</u>	<u>Requirements</u>	<u>Results</u>
Hardness, (Shore A) (ASTM D2240-15 ^{e1})	60±5	58
Tensile Strength, psi(MPa) (ASTM D412-16)	1450(10)(min)	1851(12.77)
Elongation, (%) (ASTM D412-16)	250(min)	431
Modulus at 100%, psi(MPa) (ASTM D412-16)		239(1.65)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.07
<u>G11 Tear Resistance, (ASTM D624-00)</u>	17kN/m(Die B)(min)	29.85
<u>G21 Tear Resistance, (ASTM D624-00)</u>	17kN/m(Die C)(min)	22.53
<u>A25 Heat Age, 70 Hrs @ 125 °C (ASTM D865-11)</u>		
Hardness Change, pts.	+10(max)	+1
Tensile Strength Change, %	-20(max)	-11
Elongation Change, %	-40(max)	-2
Weight Change, %		+0.1
<u>B35 Compression Set, 22 Hrs @ 125 °C (ASTM D395-18, Method B)</u>	70%(plied)(max)	16.8
<u>B44 Compression Set, 70 Hrs @ 100 °C (ASTM D395-18, Method B)</u>	35%(plied)(max)	23.1
<u>EA14 Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16a)</u>		
Hardness Change, pts.		-2
Tensile Strength Change, %		-3
Elongation Change, %		-2
Volume Change, %	±5	+1.3
<u>F19 Low-Temperature Brittleness Point Test, 3 minute @ -55 °C (ASTM D2137-11, Method C)</u>		
Sample type: T-50,		
Coolant : Isopropyl alcohol,		
Low Temperature Property	no-cracks	pass

APPROVAL Der
(Lab Manager)

AUDIT Ru-Ling Liu
(Chemical Engineer)

REPORT Chian-Yi |
(Laboratory Specialist)