

LABORATORY REPORT

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E-07-D

Date:Jul/08/2019

MATERIAL : ETHYLENE PROPYLENE
 COMPOUND : E7083AA
 SPEC. : ASTM D2000 M4CA714 A25 B35 EA14 F17 G21 Z1 Z2 Z3 Z4
 Z1=WRAS APPROVAL
 Z2=Elongation min. 150%
 Z3= W270 CERTIFICATION
 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})	70±5	72
Tensile Strength, psi(MPa) (ASTM D412-16)	2031(14)(min)	2046(14.11)
<u>Z2</u> Elongation, (%) (ASTM D412-16)	150(min)	174
Modulus at 100%, psi(MPa) (ASTM D412-16)		711(4.90)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.12
<u>G21</u> <u>Tear Resistance (ASTM D624-00)</u>	26kN/m(Die C)(min)	28.65
<u>A25</u> <u>Heat Age, 70 Hrs @ 125 °C (ASTM D865-11)</u>		
Hardness Change, pts.	+10(max)	+2
Tensile Strength Change, %	-20(max)	-9
Elongation Change, %	-40(max)	-6
Weight Change, %		+0.3
<u>B35</u> <u>Compression Set, 22 Hrs @ 125 °C (ASTM D395-18, Method B)</u>	70%(plied)(max)	15.3
<u>EA14</u> <u>Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16a)</u>		
Hardness Change, pts.		-2
Tensile Strength Change, %		-8
Elongation Change, %		-3
Volume Change, %	±5	+1.6
<u>F17</u> <u>Low-Temperature Brittleness Point Test, 3 minute @ -40 °C (ASTM D2137-11, Method C)</u>		
Sample type: T-50,		
Coolant : Isopropyl alcohol,		
Low Temperature Property	no crack	pass

APPROVAL Dennis
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REPORT Chian-Yi Lee
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