

LABORATORY REPORT

Page:1/1

E-07-D

Date: Aug/19/2019

MATERIAL : ETHYLENE PROPYLENE
 COMPOUND: E7053AA
 SPEC.: ASTM D2000 M3DA710 A26 B36 C32 EA14 F19 G11 Z1 Z2 Z3
 Z1=ELONGATION 150% (MIN)
 Z2=WRAS APPROVAL
 Z3=Service Temperature -55°C ~ +125°C
 COLOR: BLACK

	<u>Requirements</u>	<u>Results</u>
<u>Original Physical Properties</u>		
Hardness,(shore A) (ASTM D2240-15 ^{e1})	70±5	72
Tensile Strength,psi(MPa) (ASTM D412-16)	1450(10)(min)	2247(15.50)
Z1 Elongation,(%) (ASTM D412-16)	150(min)	185
Modulus at 100%,psi(MPa) (ASTM D412-16)		754(5.2)
G11 Tear resistance,(kN/m) (ASTM D624-00, <u>Die B</u>)	17(min)	24.15
Density,(Mg/m ³) (CNS 5341-96,Method A)		1.13
<u>A26 Heat age, 70 Hrs @ 150 °C (ASTM D865-11)</u>		
Hardness Change, pts.	+10(max)	+2
Tensile Strength Change, %	-20(max)	-12
Elongation Change, %	-20(max)	-12
Weight Change, %		-0.3
<u>B36 Compression set, 22 Hrs @ 150 °C (ASTM D395-18,Method B)</u>		
	25%(plied)(max)	14.8
<u>C32 Ozone Resistance, 50 pphm, 70 Hrs @ 40 °C (ASTM D1171-18)</u>		
	no-crack	pass
<u>EA14 Water resistance, 70 Hrs @ 100 °C (ASTM D471-16a)</u>		
Hardness Change, pts.		0
Tensile Strength Change, %		-13
Elongation Change, %		-14
Volume Change, %	±5	+0.8
<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 Dennis
 (Lab Manager)

AUDIT Ru-Ling Liu
 (Chemical Engineer)

REPORT Reachel
 (Laboratory Specialist)