

**SO GIANT OIL SEAL INDUSTRIAL CO., LTD.**

TEST REPORT  
MATERIAL : SE11070

Press Cure                      Post Cure      Date: 2012/12/31  
Sheet: 10 min 170                      Sheet: 4 hr 200  
Button:     min                          Button:     hr    

Spec: ASTM D2000 M7GE705B37EA14EO16EO36F19Z:EB100%

Original Properties:	Spec.	Result
Hardness Type A,ASTM D2240	70±5	75
Tensile Strength,ASTM D412,Psi,Min	725	832
Elongation, ASTM D412,%Min	Z1 100	181
Tear resistance,ASTM D624(Die C/Die B),Kgf/cm		14/12
Modulus at 100 %, ASTM D412,Psi		669
Modulus at 200 %, ASTM D412,Psi		
Modulus at 300 %, ASTM D412,Psi		
Specific Gravity		1.422

A Heat resistance,ASTM D573, 200 at 70 h	Spec.	Result
Hardness Change	Point Max	+3
Tensile Strength Change	%,Max	+9
Elongation Change	%,Max	-37
Volume Change	%	-1.6

A Heat resistance,ASTM D573, at h	Spec.	Result
Hardness Change	Point Max	
Tensile Strength Change	%,Max	
Elongation Change	%,Max	
Volume Change	%	

TR-10 Retraction at Lower Temperature resistance,ASTM D1329, 51 mm die,50% elongation, retraction 10% min -43.9

EA 14 Water resistance,ASTM D471, 100 at 70 h	Spec.	Result
Hardness Change	Point Max	±5 -1
Tensile Strength Change	%,Max	-6
Elongation Change	%,Max	-10
Volume Change	%	±5 +2.7

EO16 Fluid Resistance,ASTM D471,IRM901 Oil, 150 at 70 h	Spec.	Result
Hardness Change	Point Max	-15~0 -4
Tensile Strength Change	%,Max	-20 +6
Elongation Change	%,Max	-20 -16
Volume Change	%	0~+15 +4.9

EO36 Fluid Resistance,ASTM D471,IRM903 Oil, 150 at 70 h	Spec.	Result
Hardness Change	Point Max	-40 -23
Tensile Strength Change	%,Max	-16
Elongation Change	%,Max	-12
Volume Change	%	+60 +35.4

EO ASTM Oil :	* hrs
Hardness Change	
Tensile Strength Change	
Elongation Change	
Volume Change	

EF ASTM I Oil :	* hrs
Hardness Change	
Tensile Strength Change	
Elongation Change	
Volume Change	

EF Fuel resistance :	* hrs
Hardness Change	
Tensile Strength Change	
Elongation Change	
Volume Change	

B <u>37</u> Compression Set,ASTM D395,Method B,175 at 22 h,%,Max 30 28
B <u>   </u> Compression Set,ASTM D395,Method B, at h,%,Max
B <u>   </u> Compression Set,ASTM D395,Method B, at h,%,Max

F19 Low-temperature resistance,ASTM D2137,Method C,3min at -55 PASS