MR O-RING
THE EASIEST WAY TO BUY O-RINGS ONLINE

Material Datasheet

Compound #: A80 — AFLAS, Black, General Purpose

Material Summary		
Material Type:	AFLAS Rubber, Asahi 100S Polymer	
Durometer:	80	
Color:	Black	
Recommended Temperature Range (Static):	-10°C to 220°C	
Cure System:	Peroxide	
Specification:	ASTM D2000 M2HK810 A1-10 B37 B38	
Original Properties	**Requirements**	**Typical Results**
Hardness, (Shore A) (ASTM D2240-15$^{\varepsilon 1}$)	80±5	81
Tensile Strength, psi(MPa) (ASTM D412-16)	1450(10)(min)	2772(19.11)
Elongation, (%) (ASTM D412-16)	150(min)	224
Tear Resistance, Kgf/cm (Die C) (ASTM D412-16)		41
Modulus at 100%, psi(MPa) (ASTM D412-16)		1256(8.66)
Modulus at 200%, psi(MPa) (ASTM D412-16)		2641(18.21)
Specific Gravity		1.62
(A) Heat age, 70 Hrs @ 250 ℃ (ASTM D573)		
Hardness Change, pts.		0
Tensile Strength Change, %		-20
Elongation Change, %		-14
Weight Change, %		-4.5
(A) Heat age, 70 Hrs @ 275 ℃ (ASTM D573)		
Hardness Change, pts.		-1
Tensile Strength Change, %		-58
Elongation Change, %		-6
Weight Change, %		8.4
(B37) Compression set, 22 Hrs @ 175 ℃ (ASTM D395)		
-	50%(plied)(max)	47
(B38) Compression set, 22 Hrs @ 200 ℃ (ASTM D395)		
-		50
Oil Resistance, Service Liquid No. 101 Oil, 70 Hrs @ 200℃ (ASTM D471)		
Hardness Change, pts.		-22
Tensile Strength Change, %		-31
Elongation Change, %		+22
Volume Change, %		+24.8

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Oil Resistance, Mobil Jet Oil II, 70 Hrs @ 200°C (ASTM D471)		
Hardness Change, pts.		-15
Tensile Strength Change, %		-26
Elongation Change, %		+15
Volume Change, %		+20
Oil Resistance, ASTM Fuel C Resistance, 70 Hrs @ 23°C (ASTM D471)		
Hardness Change, pts.		-41
Tensile Strength Change, %		-66
Elongation Change, %		-36
Volume Change, %		+75.9

*American Society for Testing and Materials

Report Date: 3/8/2019