



MR O-RING

QUALITY YOU TRUST, SERVICE YOU RELY ON

Material Datasheet

Compound #: S70

Silicone, Red, FDA Compliant

Material Summary		
Material Type:	Silicone Rubber	
Durometer:	70	
Color:	Red	
Special Properties:	FDA Compliant	
Recommended Temperature Range (Static):	-55°C to 200°C	
Specification:	ASTM D2000 M7GE705 A19 B37 EA14 EO16 EO36 F19 G11	
Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-15)	70±5	69
Tensile Strength, psi(MPa) (ASTM D412-16)	725(5.00)	943(6.50)
Elongation, (%) (ASTM D412-16)	150(min)	221
Modulus at 100%, psi(MPa) (ASTM D412-16)		630
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.32
(A19) Heat age, 70 Hrs @ 225 °C (ASTM D573-04)		
Hardness Change, pts.	±10	+2
Tensile Strength Change, %	-25(max)	-8
Elongation Change, %	-30(max)	-28
Weight Change, %		-2.3
(B37) Compression set, 22 Hrs @ 175 °C (ASTM D395-18, Method B)		
-	30%(button)(max)	20
(EA14) Water Resistance, 70 Hrs @ 100 °C (ASTM D471-16a)		
Hardness Change, pts.	±5	-1
Tensile Strength Change, %		-3
Elongation Change, %		-14
Volume Change, %	±5	+1.7
(EO16) IRM 903 Oil, 70 Hrs @ 150 °C (ASTM D471-16a)		
Hardness Change, pts.	-15~0	-6
Tensile Strength Change, %	-20(max)	-3
Elongation Change, %	-20(max)	-6
Volume Change, %	0~+15	+4.3



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(EO36) IRM 903 Oil, 70 Hrs @ 150 °C (ASTM D471-16a)		
Hardness Change, pts.	-40(max)	-20
Tensile Strength Change, %		-21
Elongation Change, %		-14
Volume Change, %	+60(max)	+33.6
(F19) Low-Temperature Brittleness Point Test (ASTM D2137-11, Method C)		
Sample type: T-50,		
Coolant : Isopropyl alcohol		
Low Temperature Property	no crack	pass
(G11) Tear Resistance (ASTM D624-00)		
	9kN/m(Die B)(min)	11.68

*American Society for Testing and Materials

Report Date: 3/4/2022

Information within this report is believed to be accurate and reliable. However, Mr. O-Ring makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate prior to use.