



**MR O-RING**  
THE EASIEST WAY TO  
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## Material Datasheet

**Compound #: N90C**

**Nitrile (Buna), Black, General Purpose**

### Material Summary

Material Type:	NBR
Durometer:	90
Color:	Black
Recommended Temperature Range (Static):	-40°C to 100°C
Cure System:	Sulfur
Specification:	ASTM D2000 M7BG910 B14 EO14 EO34 F16

Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240)	90±5	89
Tensile Strength, psi(MPa) (ASTM D412)	1450(10)(min)	2040(14.07)
Elongation, (%) (ASTM D412)	100(min)	125
<b>(B14) Compression set, 22 Hrs @ 100 °C (ASTM D395)</b>		
-	25%(button)(max)	20.9
<b>(EO14) IRM 901 Oil, 70 Hrs @ 100 °C (ASTM D471)</b>		
Hardness Change, pts.	-5~+15	+4
Tensile Strength Change, %	-25(max)	-1.9
Elongation Change, %	-45(max)	-10
Volume Change, %	-10~+5	-1.1
<b>(EO34) IRM 903 Oil, 70 Hrs @ 100 °C (ASTM D471)</b>		
Hardness Change, pts.	-10~+5	-9
Tensile Strength Change, %	-45(max)	-13.3
Elongation Change, %	-45(max)	-10
Volume Change, %	0~+25	+16.1
<b>(F16) Low-Temperature Resistance, 3 minute @ -35 °C (ASTM D2137)</b>		
Brittle Point	Non-Brittle	Pass

\*American Society for Testing and Materials

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.