



## Nitrile 70 O-Rings

**Material: Nitrile 70**

**General purpose NBR70**

**Spec. ASTM D2000 M2BG710 B14 EF11 EF21 EO14 EO34**

	Required	Result	Method
<b>Original Properties</b>			
Hardness: Shore A durometer	70+/-5	71	ASTM D2240
Tensile strength, min, psi	1450	2160	ASTM D412
Ultimate elongation, min.a %	250	395	ASTM D412
<b>Basic requirements</b>			
<b>Heat aged properties 70 hrs @ 100 deg C</b>			ASTM D573
Hardness change, Shore A durometer	+/-15	+4	
Tensile strength, Change, %	+/-30	+6	
Ultimate elongation, Change, %	-50max	-20	
<b>B14 Compression Set, Method B, 22 hrs @100 deg C, % max., (Test Button)</b>	25	11.2	ASTM D395
<b>EF11 Fluid Resistance, Reference Fuel A, 70 hrs @ 23 deg C</b>			ASTM D471
Hardness change, Shore A durometer	+/-10	-1	
Tensile strength, Change, %	-25max	-7	
Ultimate elongation, Change, %	-25max	-15	
Volume change, %	-5 to +10	+2	
<b>EF21 Fluid Resistance, Reference Fuel B, 70 hrs @ 23 deg C</b>			ASTM D471
Hardness change, Shore A durometer	0 to -30	-11	
Tensile strength, Change, %	-60max	-24	
Ultimate elongation, Change, %	-60max	-29	
Volume change, %	0 to +40	+25	
<b>EO14 Fluid Resistance, No. 1 oil, 70 hrs @ 100 deg C</b>			ASTM D471
Hardness change, Shore A durometer	-5 to +10	+5	
Tensile strength, Change, %	-25max	+9	
Ultimate elongation, Change, %	-45max	-26	
Volume change, %	-10 to +25	-8.6	
<b>EO34 Fluid Resistance, IRM 903 Oil, 70 hrs @ 100 deg C</b>			ASTM D471
Hardness change, Shore A durometer	-10 to +5	+4	
Tensile strength, Change, %	-45max	-8	
Ultimate elongation, Change, %	-45max	-10	
Volume change, %	0 to +25	+6.2	

**\*\* The test results are based on test slabs or test buttons, not on actual parts.**