

# Material Data Sheet | O-RING

## PHYSICAL TEST REPORT

**MATERIAL COMPOUND NO.** N70 BUNA 70 DUROMETER BLACK

**APPLICATION SPECIFICATION:** ASTM D2000 M2BG 720 A14 B14 EA14 EO34 EF11 EF21 F17

<u>PHYSICAL PROPERTIES:</u>	<u>TEST COND</u>	<u>ASTM D2000</u>
Hardness Shore A, pts	67	70+-5
Tensile strength, psi	2216	2000
Ultimate elongation, %	390	250 MIN
Specific gravity	1.22	
<b><u>A14 HEAT RESISTANCE: 70 hrs. @ 100°C TEST METHOD D573</u></b>		
Hardness change, pts	+4	+/-15
Tensile strength change, %	+15	+/-30
Ultimate elongation change, %	-11	-50 MAX
<b><u>B14 COMPRESSION SET: 22 hrs. @ 100°C TEST METHOD D395</u></b>		
	11	25 MAX
<b><u>EA14 ASTM NO. 1 OIL: 70 hrs. @ 100°C TEST METHOD D471</u></b>		
Hardness Change, pts	+1	+/-10
Volume change, %	+5	+/-15
<b><u>E034 ASTM NO. 3 OIL: 70 hrs. @ 100°C TEST METHOD D471</u></b>		
Hardness change, pts	-1	-10/+5
Tensile strength change, %	+12	-45 MAX
Elongation change, %	-1	-45 MAX
Volume change, %	+1	0 - +25
<b><u>EA14 WATER RESISTANCE: 70 hrs. @ 100°C TEST METHOD 573</u></b>		
Hardness change, pts	+1	+/-10
Volume change, %	+5	+/-15
<b><u>EF11 FLUID RESISTANCE, REF. FUEL A: 70 hrs. @ 23°C TEST METHOD D471</u></b>		
Hardness change, pts	-1	+/-10
Tensile strength change, %	-1	-25 MAX
Elongation change, %	-5	-25 MAX
Volume change, %	+1	-5 to +10
<b><u>EF21 FLUID RESISTANCE, REF. FUEL B: 70 hrs. @ 23°C TEST METHOD D471</u></b>		
Hardness change, pts	-6	0 to -30
Tensile strength change, %	-13	-60 MAX
Elongation change, %	-11	-60 MAX
Volume change, %	+12	0 to +40
<b><u>F17 LOW TEMPERATURE BRITTLNESS</u></b>		
-40°C x 180°C BEND x 3 MIN.	NO CRACKS	NO CRACKS

NOTE: FLEX DATA WAS OBTAINED BY TESTING SLAB/BUTTON AND ARE FOR REFERENCE ONLY.