

# The O-Ring Store LLC



We make getting o-rings easy!

## **BUNA-N 50 DUROMETER DATA SHEET FOR COMPOUND B50**

### **Compound Features:**

- 50 Durometer for applications requiring softer material.
- Excellent resistance to petroleum products.
- Excellent water resistance.
- Resistance to ethylene glycol fluids.
- Works well with silicone grease or oil lubricants.
- Good low temperature flexibility.
- Good abrasion and wear resistance.
- Good compression set.
- Good Permeation resilience.

### **Compound Limitations:**

- Poor resistance to UV/sunlight, ozone, and weathering.
- Halogenated hydrocarbons.
- Poor resistance to ketones (MEK) and other strong solvents.
- Poor resistance to strong acids.
- Poor resistance to automotive and aircraft brake fluids.

### **Temperature Range:**

-40°F to +250°F (-40°C to +121°C)

### **ASTM Callout:**

ASTM D2000-99 Grade M2BG507 A14 B14 EA14 EO34 F17

### **Recommended Shelf Life:**

15 Years (Certificate of conformance available upon request)

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ORIGINAL PROPERTIES					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
Durometer	-	-	Shore A	50± 5	51
Tensile Strength			PSI	1450	1759
Elongation Resistance			%	350	456
Specific Gravity			-	-	1.268

HEAT RESISTANCE					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
Durometer Change	A14	70 Hours @ 100°C	Shore A	±15	+4
Tensile Strength Change			%	±30	+4.7
Elongation Resistance Change			%	-50	-14.9

COMPRESSION SET					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
Original Deflection	B14	22 Hours @ 100°C	%	25 Max	14.3

WATER RESISTANCE					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
Durometer Change	EA14	22 Hours @ 100°C	Shore A	±10	-4
Volume Change			%	±15	+4.8

IRM #903 OIL RESISTANCE					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
Durometer Change	EO34	70 Hours @ 100°C	Shore A	-10 to +5	-3
Tensile Strength Change			%	-45	-10.2
Elongation Resistance Change			%	-45	-17.3
Volume Change			%	0 to +12	+2.2

LOW TEMPERATURE RETRACTION					
Properties	ASTM Designation	Test Method	Unit of Measure	ASTM D2000 Specification	B50 Compound Property
ASTM D2137	F16	3 Minutes @ -40°C	Pass/Fail	Non-Brittle	Pass

Information within is believed to be accurate and reliable. However, The O-Ring Store, LLC 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 the material prior to use.

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