

Designed to be a general purpose material, Marco Compound #B1000 is formulated to provide value by balancing cost and performance. Specific physical and chemical resistances vary by compound formulation. Please contact [sales@marcorubber.com](mailto:sales@marcorubber.com) for assistance in selecting a specialized compound.

## ABOUT #B1000

Marco Compound B1000 is the most commonly used general purpose o-ring material because of relative low cost, good mechanical properties, and basic resistance to many common lubricants. Specific physical and chemical resistances vary by compound formulation.

## FEATURES

- Relative low cost.
- Good/Excellent resistance to compression set and tear/abrasion.
- Good/Excellent resistance to many petroleum oils/greases, hydraulic fluids, alcohol, ambient water, silicone greases, Di-ester base lubricants and ethylene-glycol based fluids.

## APPLICATION EXAMPLES

- Automotive applications
- Pneumatic applications
- Hydraulic Application

## ADDITIONAL INFORMATION

- Service Temperature of -30° to 250°F
- Cure System: Sulphur
- Spec: ASTM D2000 M2BG714 A14 B14 EA14 EF11 EF21 E014 E034 F17

This information is accurate and reliable to the best of our knowledge. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use.

## PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, per ASTM D2240	70 +/- 5	68
Color	Black	Black
Tensile Strength, MPa (psi), per ASTM D412	14.1 (2,030) min.	15.8 (2,275)
Ultimate Elongation, %, per ASTM D412	250 min.	330
<b>HEAT RESISTANCE – A14, ASTM D 573 (70 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, per ASTM D2240	+/- 15	6
Tensile Strength Change, %, per ASTM D412	+/- 30	-11
Ultimate Elongation Change, %, per ASTM D412	-50 max.	-23
<b>COMPRESSION SET – B14, ASTM D 395 Method B (22 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Permanent Set %	25 max.	14
<b>COMPRESSION SET – ASTM D 395 Method B (70 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Permanent Set %	-	15
<b>FLUID RESISTANCE, Water – EA14, ASTM D 471 (70 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, per ASTM D2240	+/- 10	-4
Volume Change, %, per ASTM D412	+/- 15	11
<b>FLUID RESISTANCE – ASTM Fuel A – EF11, ASTM D 471(70 hrs. @ 23°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, per ASTM D2240	+/- 10	-3
Tensile Strength Change, %, per ASTM D412	-25 max.	-13
Ultimate Elongation Change, %, per ASTM D412	-25 max.	-22
Volume Change, %, per ASTM D412	-5 to +10	+3
<b>FLUID RESISTANCE – ASTM Fuel B – EF21, ASTM D 471 (70 hrs. @ 23°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, per ASTM D2240	-30 to 0	-14
Tensile Strength Change, %, per ASTM D412	-60 max.	-36
Ultimate Elongation Change, %, per ASTM D412	-60 max	-32
Volume Change, %, per ASTM D412	0 to +40	22
<b>FLUID RESISTANCE –ASTM #1 Oil – E014, ASTM D 471 (70 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, per ASTM D2240	-5 to +10	+6
Tensile Strength Change, %, per ASTM D412	-25 max.	+6
Ultimate Elongation Change, %, per ASTM D412	-45 max.	-20
Volume Change, %, per ASTM D412	-10 to +5	-9

FLUID RESISTANCE – IRM 903 Oil, -E034, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, per ASTM D2240	-10 to +5	-6
Tensile Strength Change, %, per ASTM D412	-45 max.	-14
Ultimate Elongation Change, %, per ASTM D412	-45 max.	-25
Volume Change, %, per ASTM D412	-10 to +25	+5
LOW TEMPERATURE RESISTANCE – F17, ASTM D 2137 Method A, 9.3.2	ASTM D2000 Requirements	Typical Test Results
(Non-brittle after 3 min. @ -40°C)	Pass	Pass