

Designed to be a general purpose 90A durometer material, Marco Compound #B1001 is formulated to provide value by balancing cost and performance. Specific physical and chemical resistances vary by compound formulation. Please contact sales@marcorubber.com for assistance in selecting a specialized compound.

ABOUT #B1001

Marco Compound B1001 is the most commonly used general purpose 90A durometer 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.
- High 90A durometer
- 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

- High pressure applications
- Automotive applications
- Pneumatic applications
- Hydraulic Application

ADDITIONAL INFORMATION

- Service Temperature of -30° to 250°F
- Cure System: Sulphur
- Spec: ASTM 2000 M6BG910 A14 B14 EA14 E014 E034

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	90 +/- 5	88
Color	Black	Black
Tensile Strength, MPa (psi)	10.1 (1,450) min.	13.2 (1,900)
Ultimate Elongation, %	100 min.	135
HEAT RESISTANCE – A14, ASTM D 573 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+/- 15	3
Tensile Strength Change, %	+/- 30	6
Ultimate Elongation Change, %	-50 max.	-25
COMPRESSION SET – B14, ASTM D 395 Method B (22 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	25 max.	10
FLUID RESISTANCE, WATER – EA14, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+/- 10	-5
Volume Change, %	+/- 15	6
FLUID RESISTANCE – ASTM #1 Oil – E014, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+/- 5	4
Tensile Strength Change, %	-25 max.	+4
Ultimate Elongation Change, %	-45 max.	-22
Volume Change, %	-10 to +5	-4
FLUID RESISTANCE – IRM 903 Oil, -E034, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	-10 to +5	-8
Tensile Strength Change, %	-45 max.	-14
Ultimate Elongation Change, %	-45 max.	-19
Volume Change, %	0 to +25	9
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