

Designed to be a low cost, FDA compliant material, Marco Compound #B1002 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 #B1002

Marco Compound B1002 is a commonly used FDA compliant 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

- FDA Compliant
- 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.
- FDA compliant NBR per 21 CFR 177.2600 for food contact and some medical uses.

## APPLICATION EXAMPLES

- Food processing
- Mechanical seals
- Valves and pumps
- Mixers

## ADDITIONAL INFORMATION

- Service Temperature of -30° to 250°F
- Cure System: Sulphur
- Spec: ASTM 2000 M2BG714 A14 B14 EA14 E014 E034 EF11 EF21

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	70 +/- 5	67
Color	Black	Black
Tensile Strength, psi	2031	2050
Ultimate Elongation, %	250	300
<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	+/- 15	3
Tensile Strength Change, %	+/- 30	11
Ultimate Elongation Change, %	-50	-9
<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	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	+/- 10	0
Volume Change, %	+/- 15	2
<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	-5 to 10	+7
Tensile Strength Change, %	-25	13
Ultimate Elongation Change, %	-45	-12
Volume Change, %	-10 to 5	-7
<b>FLUID RESISTANCE – IRM 903 Oil, -E014, ASTM D 471 (70 hrs. @ 100°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points	-10 to 5	-7
Tensile Strength Change, %	-45	-14
Ultimate Elongation Change, %	-45	-12
Volume Change, %	0 to 25	6
<b>FLUID AGING – FUEL A, - EF11, ASTM D 471 (70 hrs. @ 23°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points	+/- 10	-1
Tensile Strength Change, %	-25	-3
Ultimate Elongation Change, %	-25	-6
Volume Change, %	-5 to 10	2
<b>FLUID AGING – FUEL B, -EF21, ASTM D 471 (70 hrs. @ 23°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points	-30 to 0	-17
Tensile Strength Change, %	-60	-37
Ultimate Elongation Change, %	-60	-41
Volume Change, %	0 to 40	27