# B1007 MATERIAL SUMMARY

40 Durometer, Black, Commercial Grade Buna-N

Request a Quote

Designed to be a general purpose 40A material, Marco Compound #B1007 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 #B1007

Marco Compound B1007 is the most commonly used general purpose 40A 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.
- Soft 40 A 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

- Automotive applications
- Pneumatic applications
- Hydraulic Application

## ADDITIONAL INFORMATION

- Service Temperature of -30° to 250°F
- Cure System: Sulphur
- Spec: ASTM D2000 M2BG407 A14 B14 E014 E034

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## PHYSICAL PROPERTIES

| ORIGINAL PROPERTIES | ASTM D2000 Requirements | Typical Test Results |
|---|---|---|
| Hardness, Shore A | 40 +/- 5 | 43 |
| Color | Black | Black |
| Tensile Strength, psi | 1,008 min. | 1250 |
| Ultimate Elongation, % | 450 min. | 660 |
| Specific Gravity | | 1.211 |
| HEAT RESISTANCE – A14, ASTM D 573 (70 hrs. @ 100°C) | ASTM D2000 Requirements | Typical Test Results |
| Hardness Change, points | +/- 15 | 5 |
| Tensile Strength Change, % | +/- 30 | 0 |
| Ultimate Elongation Change, % | -50 max. | -6 |
| COMPRESSION SET – B14, ASTM D 325 (70 hrs. @ 100°C) | ASTM D2000 Requirements | Typical Test Results |
| Permanent Set % | 25 max. | 10 |
| FLUID RESISTANCE –ASTM #1 Oil – E014, ASTM D 471 (70 hrs. @ 100°C) | ASTM D2000 Requirements | Typical Test Results |
| Hardness Change, points | -5 to +10 | +3 |
| Tensile Strength Change, % | -25 max. | -3 |
| Ultimate Elongation Change, % | -45 max. | -6 |
| Volume Change, % | -10 to +5 | -2 |
| 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 | -9 |
| Tensile Strength Change, % | -45 max. | -38 |
| Ultimate Elongation Change, % | -45 max. | -15 |
| Volume Change, % | 0 to +25 | 8 |