

M1001 is manufactured to AMS-P-83461 and is formulated to provide value with balance cost and performance. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

ABOUT #M1001

Most commonly used general purpose "AMS-SPEC" 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

- Meets AMS-P-83461
- Peroxide cured to meet the requirements of hydraulics in military aircraft
- 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

- Aerospace applications
- Pneumatic applications
- Hydraulic Application

ADDITIONAL INFORMATION

- Service Temperature of -65° to 275°F
- Cure System: Peroxide
- Spec: ASTM D2000 M2BG756 B14 E014 E034 Z1 Z2

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 – Z1	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	75 +/- 5	72
Color	Black	Black
Tensile Strength, psi	870 min.	1900
Ultimate Elongation, %	100 min.	150
HEAT RESISTANCE – A14, ASTM D 573 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+/- 15	2
Tensile Strength Change, %	+/- 30	-6
Ultimate Elongation Change, %	-50 max.	-8
COMPRESSION SET – B14, ASTM D 325 Method B (22 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	25 max.	11
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	6
Tensile Strength Change, %	-25 max.	15
Ultimate Elongation Change, %	-45 max.	3
Volume Change, %	-10 to +5	-10
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.	-3
Ultimate Elongation Change, %	-45 max.	-10
Volume Change, %	0 to +25	12
LOW TEMPERATURE RESISTANCE – Z2, ASTM D1329	ASTM D2000 Requirements	Typical Test Results
TR-10, °C (°F)	Report	-49 (-56)