

Marco compound L1003 is a 90A durometer formulation for use in high pressure applications. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

ABOUT #L1003

Aflas materials exhibit excellent chemical, heat and steam resistance. They provide superior performance in water, steam and virtually all caustics making them ideal for pharmaceutical and biotechnology manufacturers that use steam and caustic chemicals in the sterilization process. L1003 is a high durometer formulation.

FEATURES

- Excellent steam and caustic resistance up to 400°F (204°C)
- Resistant to acids and bases
- Amines and H₂S resistance
- Ozone resistance
- Resistant to highly reactive organic and inorganic chemicals
- Excellent volume resistivity (greater than 10¹⁶Ω cm)
- Unaffected by extended exposure to 200°C steam

APPLICATION EXAMPLES

- Continuous use at 230°C
- Applications with highly reactive organic and inorganic chemicals
- Radiation applications up to 200 MRad of gamma-ray radiation

ADDITIONAL INFORMATION

- Service Temperature of 15° to 450°F
- Spec: ASTM D2000 M3HK910 A1-10 B37 EF31

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, ASTM D2240 (Z1=75+/-5)	90 +/- 5	88
Color	Black	Black
Tensile Strength, psi, ASTM D412	1440	1970
Ultimate Elongation, %, ASTM D412	100	139
Specific Gravity	Report	1.61
HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 482°F)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	10	0
Tensile Strength Change, %	-25	8
Ultimate Elongation Change, %, max.	-25	30
FUEL C OIL IMMERSION – 70 hrs @ 73°F	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-4
Tensile Strength Change, %, ASTM D1414	-25	-7
Ultimate Elongation Change, %, ASTM D1414	-20	-12
Volume Change, %, ASTM D471	0 to +10	6
COMPRESSION SET - 22 hrs. @ 392°F	ASTM D2000 Requirements	Typical Test Results
Compression Set, %	50	36