

L1000 provides excellent performance in SIP (steam in place), CIP (clean in place) and WFI (water for injection) 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 #L1000

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. L1000 is a general use material.

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 25° to 450°F
- Spec: Tested to AMS 7255C

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	AMS 7255C Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	80	79
Color	Black	Black
Tensile Strength, psi, ASTM D412	1800	1823
Ultimate Elongation, %, ASTM D412	150	190
Specific Gravity	Report	1.52
Compression Set, % (70 hrs. @ 392 °F)	----	32
HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 482°F)	AMS 7255C Requirements	Typical Test Results
Hardness Change, points	0 to +10	0
Tensile Strength Change, %	+/- 25	8
Ultimate Elongation Change, %, max.	-25	30
Weight Change, %	+/-5	-3
50% SODIUM HYDROXIDE IN WATER IMMERSION – ASTM D 573 (22 hrs. @ 212°F)	AMS 7255C Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	2
Tensile Strength Change, %, ASTM D1414	-20	6
Ultimate Elongation Change, %, ASTM D1414	-15 max.	-5
Volume Change, %, ASTM D471	0 to +5	0
AMS 3023 FLUID IMMERSION – ASTM D 471 and ASTM D1414 (22 hrs. @ 212°F)	AMS 7255C Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-25	-9
Tensile Strength Change, %, ASTM D1414	-30	-16
Ultimate Elongation Change, %, ASTM D1414	-20 max.	-11
Volume Change, %, ASTM D471	0 to +30	23
TEMPERATURE RETRACTION – ASTM D1329	AMS 7255C Requirements	Typical Test Results
TR-10, Degrees F	+39 or colder	+36
LOW TEMPERATURE BRITTLE POINT – ASTM D2137	AMS 7255C Requirements	Typical Test Results
Brittle Point, Degrees F	-31 or colder	-38