(800) 775-6525
sales@marcorubber.com
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Marco Compound #L1000
80 Durometer, Black, General Use TFE/P (Aflas®) FEPM
Technical Datasheet

General Description:
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 provides excellent performance in SIP (steam in place), CIP (clean in place) and WFI (water for injection) applications. Please contact sales@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:
- Excellent steam and caustic resistance up to 400° F (204° C)
- Resistant to acids and bases
- Amines and H_2S resistance
- Ozone resistance
- Resistant to highly reactive organic and inorganic chemicals
- Excellent volume resistivity (greater than $10^{16}\Omega$ cm)
- Radiation resistance up to 200 MRad of gamma-ray radiation
- Unaffected by extended exposure to 200 °C steam
- Continuous use at 230 °C
- Resistant to highly reactive organic and inorganic chemicals

Limitations:
- Aromatic Fuels
- Ketones
- Carbon tetrachloride
- Chlorinated Hydrocarbons
- Organic Refrigerants

Service Temperature:
25°F to 450°F (-4° to 232°C)

TYPICAL PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	AMS 7255C Requirements	Typical Test Reports
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	80	79
Color	Black	Black
Tensile Strength, psi, ASTM D412	1,800	1823
Ultimate Elongation, %, ASTM D412	150	190
Specific Gravity	Report	1.52
Compression Set, % (70 hrs. @ 392 °F)	-----	32

This information is to the best of our knowledge accurate and reliable. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It's the customer's responsibility to evaluate parts prior to use.

HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 482°F)	**AMS 7255C Requirements**	**Typical Test Reports**
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 Reports**
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 Reports**
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 Reports**
TR-10, Degrees F	+39 or colder	+36

LOW TEMPERATURE BRITTLE POINT – ASTM D2137	**AMS 7255C Requirements**	**Typical Test Reports**
Brittle Point, Degrees F	-31 or colder	-38

Date: 2016-5-10

AFLAS® is a registered trademark of the Asahi Glass Co., Ltd

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