



## Marco Compound # V1043

### 90 Durometer, Black, Commercial Grade FKM Type B

### Technical Datasheet

#### **Common Names:**

FKM, Fluoropolymer, Fluorel®, Viton®

#### **General Description:**

FKM compounds are widely used in chemical, automotive, aerospace and industrial applications. These compounds offer excellent chemical and temperature resistance. Marco compound V1043 is a B Type FKM which offers increased hydrocarbon and fuel resistance over standard FKM. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact [engineering@marcorubber.com](mailto:engineering@marcorubber.com) for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

#### **Features:**

- Type B Polymer
- High temperature resistance.
- Excellent resistance to acids, fuels, mineral oils, greases, aliphatic, aromatic and chlorinated hydrocarbons, non-flammable hydraulic fluids (HFD) and many organic solvents and chemicals.
- Excellent resistance to aging and ozone.
- Low gas permeability, low compression set.

#### **Limitations:**

- Steam, hot water, amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

#### **Cure System:**

Bisphenol

#### **Service Temperature:**

-15 to 450° F (-26 to 230° C)

#### **Specification:**

ASTM D2000 M3HK910 A1-10 B37 EF31 Z1 (Z1=B TYPE)

### PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	90 +/- 5	90
Color	Black	Black
Tensile Strength, MPa, (psi), ASTM D412	10 (1,440)	12.2 (1,769)
Ultimate Elongation, %, ASTM D412	100 Min.	115

<b>HEAT RESISTANCE – A1-10, ASTM D 573 (70 hrs. @ 250°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A, ASTM D2240	+10 (max)	+1
Tensile Strength Change, %, ASTM D412	-25 (max)	-5
Ultimate Elongation Change, %, ASTM D412	-25 (max)	+19

<b>COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 175°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Permanent Set %	30 (max)	17

<b>FLUID RESISTANCE – ASTM Fuel C – EF31, ASTM D 471(70 hrs. @ 23°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A, ASTM D2240	+/- 5	-2
Tensile Strength Change, %, ASTM D412	-25 (max)	-2
Ultimate Elongation Change, %, ASTM D412	-20 (max)	+22
Volume Change, %, ASTM D471	0 to + 10	+2

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