



## Marco Compound #V1216

### 60 Durometer, Black, FKM (Viton®) ETP

### Technical Datasheet

#### **Common Names:**

Viton® ETP, Viton Extreme

#### **General Description:**

FKM compounds are widely used in chemical, automotive, aerospace and industrial applications. These compounds offer excellent chemical and temperature resistance. This compound is a 60 durometer ETP type FKM material which offers enhanced chemical resistance. There are many additional specialty compounds based on A, B, F, GLT, GFLT and LTFE 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:**

- High temperature resistance.
- Added resistance to low molecular weight carbonyls, amines, steam, hot water and caustic bases.
- 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:**

- Polar solvents, and glycol-based brake fluids.

#### **Cure System:**

Peroxide

#### **Service Temperature:**

-15 to 400° F

(Additional compounds may be available with expanded temperature ranges)

#### **Specification:**

ASTM D2000 M2HK610 A1-10 B37 B38 EO78 EO88

## Typical Physical Properties

Material Property	Requirement	Typical Value
Color	Black	Black
Material Type	FKM, Viton ETP	FKM, Viton ETP
Hardness, Shore A	60 ± 5	61
Tensile Strength, psi	1450 min.	1880
Elongation, %	200 min.	355
Specific Gravity	Report	1.91

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.

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<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)	+3
Ultimate Elongation Change, %, ASTM D412	-25 (max)	+3

<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 %	50 (max)	37

<b>COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Permanent Set %	50 (max)	43

<b>FLUID RESISTANCE –ASTM #101 Oil – EO78, ASTM D 471 (70 hrs. @ 200°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A, ASTM D2240	-15 to + 5	+0
Tensile Strength Change, %, ASTM D412	-40 (max)	+5
Ultimate Elongation Change, %, ASTM D412	-20 (max)	+5
Volume Change, %, ASTM D412	0 to + 15	+11.5

<b>FLUID RESISTANCE – Hatco 7700 Oil – EO88, ASTM D 471 (70 hrs. @ 200°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A, ASTM D2240	-15 to + 5	--10
Tensile Strength Change, %, ASTM D412	-40 (max)	-7
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-1
Volume Change, %, ASTM D412	0 to + 15	+22.5

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