



## Marco Compound #V1045

### 80 Durometer, Black, Conductive FKM

### 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 V1045 is specifically formulated to be electrically conductive. 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:**

- Conductive filler for EMI shielding
- 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, polar solvents, low molecular weight organic solvents and glycol-based brake fluids

#### **Cure System:**

Bisphenol

#### **Service Temperature:**

-15 to 400°F

(Additional compounds may be available with expanded temperature ranges).

#### **Specification:**

ASTM 2000 M2HK820 B37 B38 EF31 EO78

### TYPICAL PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	Typical Test Results
Hardness, Shore A	79
Color	Black
Tensile Strength, MPa, (psi)	16.4 (2,376)
Ultimate Elongation, %	420
Modulus @ 100%, MPa (psi)	4.2 (615)

HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 250°C)	Typical Test Results
Tensile Strength Change, %	-11.3
Ultimate Elongation Change, %	-28.6
Hardness Change, points	+6

HEAT RESISTANCE – ASTM D 573 (70 hrs. @ 275°C)	Typical Test Results
Tensile Strength Change, %	-24.8
Ultimate Elongation Change, %	-31.0
Hardness Change, points	+10

COMPRESSION SET – ASTM D 395 Method B (22 hrs. @ 175°C)	Typical Test Results
Permanent Set %	31.7

COMPRESSION SET – ASTM D 395 Method B (22 hrs. @ 200°C)	Typical Test Results
Permanent Set %	31.1

FLUID RESISTANCE – ASTM Fuel C – ASTM D 471(70 hrs. @ 23°C)	Typical Test Results
Tensile Strength Change, %	-24.6
Ultimate Elongation Change, %	-9.5
Hardness Change, points	-5
Volume Change, %	+5.7

FLUID RESISTANCE – ASTM Oil #1 – ASTM D 471(70 hrs. @ 150°C)	Typical Test Results
Tensile Strength Change, %	0.0
Ultimate Elongation Change, %	-2.4
Hardness Change, points	0
Volume Change, %	+0.7

FLUID RESISTANCE – ASTM Oil #3 – ASTM D 471(70 hrs. @ 150°C)	Typical Test Results
Tensile Strength Change, %	-5.2
Ultimate Elongation Change, %	+4.8
Hardness Change, points	-3
Volume Change, %	+4.5

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