



Marco Compound # V1029

80 Durometer, Black Commercial grade 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. Brown Viton can provide improved resistance to oxidative environments and reactive plasmas. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact 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.
- 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.

Service Temperature:

-15 to 400°F

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

Specification:

ASTM 2000 M2HK810 A1-10 B37 EF31

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240	80 +/- 5	84
Color	Black	Black
Tensile Strength, MPa (psi), ASTM D412	10.0 (1,450) min.	11.3 (1,638)
Ultimate Elongation, %, ASTM D412	150 Min.	160
Specific Gravity		1.87

HEAT RESISTANCE – A1-10, ASTM D 573 (70 hrs. @ 250°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+10 (max)	+5
Tensile Strength Change, %, ASTM D412	-25 (max)	+16
Ultimate Elongation Change, %, ASTM D412	-25 (max)	-21

COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	7

FLUID RESISTANCE – ASTM Fuel C – EF31, ASTM D 471(70 hrs. @ 23°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-1
Tensile Strength Change, %, ASTM D412	-25 (max)	+6
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-5
Volume Change, %, ASTM D471	0 to + 10	+ 3

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