



Marco Compound # V1097

60 Durometer, White, FDA FKM

Technical Datasheet

Common Names:

FKM, Fluoropolymer, Fluorel®, Viton®

General Description:

FKM compounds are widely used in chemical, automotive, medical, aerospace and industrial applications. These compounds offer excellent chemical and temperature resistance. V1000 is Marco's basic commercial grade compound. 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:

- White, FDA compliant
- 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 400° F

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

Specification:

ASTM 2000 M2HK607 A1-10 B37 EF31

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	60 +/- 5	65
Color	White	White
Tensile Strength, MPa (psi), per ASTM D412	7.0 (1,015) min.	11.8 (1,711)
Ultimate Elongation, %, per ASTM D412	200 Min.	238
Specific Gravity		1.873

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)	-14

COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	6

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	-4
Tensile Strength Change, %, ASTM D412	-25 (max)	-20
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-19
Volume Change, %, ASTM D471	0 to + 10	+5

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Fluorel® is a registered trademark of Dyneon.