



Marco Compound # V1210

60 Durometer Black, GF Type 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 V1210 is a GF type FKM which offers increased solvent and general chemical resistance. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact sales@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:

- High temperature resistance
- Peroxide cured
- 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, low molecular weight organic solvents and glycol-based brake fluids

Service Temperature:

-15 to 400°F (-26 to 204°C)

Specification:

ASTM D2000 M2HK614 A1-10 B37 B38 EF31 EO88

TYPICAL PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	60 +/- 5	63
Color	Black	Black
Tensile Strength, MPa (psi), per ASTM D412	14.0 (2031) min.	18.66 (2705)
Ultimate Elongation, %, per ASTM D412	200 Min.	376
Specific Gravity	-----	2.129

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.

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)	+2
Tensile Strength Change, %, ASTM D412	-25 (max)	+4
Ultimate Elongation Change, %, ASTM D412	-25 (max)	+31
Weight Change, %	-----	-2.5

COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	27.3

COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	27.8

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	-2
Tensile Strength Change, %, ASTM D412	-25 (max)	-6
Ultimate Elongation Change, %, ASTM D412	-20 (max)	+6
Volume Change, %, ASTM D471	0 to + 10	+3.5

FLUID RESISTANCE –ASTM 7700 Oil – EO88, ASTM D 471 (70 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-15 to + 5	-5
Tensile Strength Change, %, ASTM D412	-40 (max)	+5
Ultimate Elongation Change, %, ASTM D412	-20 (max)	+6
Volume Change, %, ASTM D412	+25 (max)	+9.5

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Fluorel® is a registered trademark of Dyneon.