

Marco Compound # V1081

75 Durometer, Black, Peroxide Cured 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 V1081 is a peroxide cured GF type FKM which offers increased solvent, fuel, 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:

- Highly fluorinated
- High temperature resistance.
- Good resistance to steam and hot water
- 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:

- Amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

Cure System:

Peroxide

Service Temperature:

+3 to 437°F (-16 to 225°C)

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

Specification:

ASTM D2000 M2HK810 A1-10 B37 EF31 EO78 F16 Z1 (Z1 = GF Type)

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	Specification Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240	75 +/- 5	76
Color	Black	Black
Tensile Strength, MPa (psi), ASTM D412	14 (2,030) min.	18.7 (2,711)
Ultimate Elongation, %, ASTM D412	150 Min.	283
Specific Gravity	-----	1.867

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 – ASTM D 573 (70 hrs. @ 250°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+10 (max)	+1
Tensile Strength Change, %, ASTM D412	-25 (max)	+7
Ultimate Elongation Change, %, ASTM D412	-25 (max)	-4

COMPRESSION SET – B38, ASTM D 395 Method B and ASTM D1414	Specification Requirements	Typical Test Results
% Permanent set, 22 hrs. @ 175° C	50 (max)	9

FUEL C Oil Immersion – ASTM D 471 and ASTM D1414 (70 hrs. @ 23°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-2
Tensile Strength Change, %, ASTM D412	-25 (max)	-11
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-10
Volume Change, %, ASTM D471	0 to + 10	+3

ASTM IRM # 101 Oil Immersion – ASTM D 471 and ASTM D1414 (70 hrs. @ 200°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-15 to -5	-7
Tensile Strength Change, %, ASTM D412	-40 (max)	-25
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-12
Volume Change, %, ASTM D471	0 to + 15	+10

ASTM IRM # 2, EHEN 7700 – ASTM D 471 and ASTM D1414 (70 hrs. @ 200°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	----	-12
Tensile Strength Change, %, ASTM D412	----	-14
Ultimate Elongation Change, %, ASTM D412	----	-10
Volume Change, %, ASTM D471	----	+15

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