Request a Quote

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Marco Compound # V1179
75 Durometer Black, UL157 Approved 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. 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:
- UL157 B, C, D, F, G, H & J APPROVED
- 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:
UL157 B, C, D, F, G, H & J

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Requirements	Typical Test Results
Hardness, Shore A	75 +/- 5	77
Color	Black	Black
Tensile Strength, psi (MPa)		2,262 (15.6)
Ultimate Elongation, %		180
Specific Gravity, ASTM D297		1.847
Modulus at 100%, psi (MPa)		1108 (7.64)

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ASTM Fuel A Resistance (B, C & D) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A,		0
Tensile Strength Change, %,	-40 max.	-0
Ultimate Elongation Change, %,	-40 (max)	-+3
Volume Change, %,	-1 to +25	+0.3
Dryout after ASTM Fuel A (70 hrs. @ 23° C) - Weight Change, %	+10 max.	+0.1

ASTM Fuel C Resistance (C) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A,		-3
Tensile Strength Change, %,	-40 max.	-8
Ultimate Elongation Change, %,	-40 (max)	-1
Volume Change, %,	-1 to +25	+3.1
Dryout after ASTM Fuel C (70 hrs. @ 23° C) - Weight Change, %	+10 max.	+0.7

ASTM Fuel C/Ethanol 85%/15% Resistance (C) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A		-7
Tensile Strength Change, %	-40 max.	-22
Ultimate Elongation Change, %	-40 (max)	-8
Volume Change, %	-1 to +25	+7.7
Dryout after ASTM Fuel C/Ethanol (70 hrs. @ 23° C) - Weight Change, %	+10 max.	+2.7

ASTM #3 Oil Resistance (J, F & G) - ASTM D471-06 (70 hrs. @ 100° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A		+1
Tensile Strength Change, %	-40 max.	+5
Ultimate Elongation Change, %	-40 (max)	+6
Volume Change, %	-1 to +25	+0.2

N-Hexane Resistance (J & F) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A		+1
Tensile Strength Change, %	-40 max.	-3
Ultimate Elongation Change, %	-40 (max)	-2
Volume Change, %	-1 to +25	+0.3
Dryout after N-Hexane, (70 hrs. @ 23° C) – Weight Change, %	+10 max.	+0.1

Heavy Oil Resistance (H) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A		-2
Tensile Strength Change, %	-40 max.	-11
Ultimate Elongation Change, %	-40 (max)	+14
Volume Change, %	-1 to +25	+1.8

Biodiesel Oil Resistance (B, C & D) - ASTM D471-06 (70 hrs. @ 23° C)	**Requirements**	**Typical Test Results**
Hardness Change, Shore A		-5
Tensile Strength Change, %	-40 max.	-26
Ultimate Elongation Change, %	-40 (max)	-7
Volume Change, %	-1 to +25	+7

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Fluorel® is a registered trademark of Dyneon.