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(800) 775-6525 Fax: (800) 421-2923
engineering@marcorubber.com
www.marcorubber.com

Marco Compound # V1168
65 Durometer Black, Specialty 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. 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.
- Peroxide cured. RoHS compliant
- 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

Specification:
ASTM D2000 2HK 620 A1-10 B37 B38 EF31 EO78
4HK 620 A1-11 B38 EF31 EO78
6HK 620 A1-10 A1-11 B31 EF31 EO88

RoHS Directive Compliant RoHS (2002/95/EC)

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Typical Test Results
Hardness, Shore A	65
Color	Black
Tensile Strength, MPa, (psi)	17.1 (2,476)
Ultimate Elongation, %	293
Modulus @ 100% Elongation MPa (psi)	2.0 (290)
Specific Gravity	1.95
Tear Resistance, Die B, ppi	111
Tear Resistance, Die C, ppi	98

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COMPRESSION SET – ASTM D395 Method B and ASTM D1414	Typical Test Results
Plied: 22 hrs. @ 73° F (23° C), %	8.4
Plied: 22 hrs. @ 347° F (175° C), %	11.4
Plied: 22 hrs. @ 392° F (200° C), %	12.2

HEAT RESISTANCE – AIR AGING: 70 hrs. @ 482° F (250°C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-1
Tensile Strength Change, %, ASTM D412	5.1
Ultimate Elongation Change, %, ASTM D412	16.7

HEAT RESISTANCE – AIR AGING: 70 hrs. @ 527° F (275°C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-2
Tensile Strength Change, %, ASTM D412	4.7
Ultimate Elongation Change, %, ASTM D412	68.9

DESTILLED WATER AGED: 70 hrs. @ 212°F (100° C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-2.0
Volume Change, %, ASTM D471	+3.6

FUEL A IMMERSION: 70 hrs. @ 73°F	Typical Test Results
Hardness Change, Shore A, ASTM D2240	0
Tensile Strength Change, %, ASTM D1414	-7.2
Ultimate Elongation Change, %, ASTM D1414	+2.0
Volume Change, %, ASTM D471	+0.3

FUEL B IMMERSION: 70 hrs. @ 73°F	Typical Test Results
Hardness Change, Shore A, ASTM D2240	0
Tensile Strength Change, %, ASTM D1414	-25.6
Ultimate Elongation Change, %, ASTM D1414	-8.2
Volume Change, %, ASTM D471	+0.1

FUEL C IMMERSION – ASTM D471 and ASTM D1414 (70 hrs. @ 23°C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	0
Tensile Strength Change, %, ASTM D1414	-17.1
Ultimate Elongation Change, %, ASTM D1414	-3.1
Volume Change, %, ASTM D471	+1.9

ASTM OIL #1 (IRM 901): 70 hrs. @ 302°F (150° C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-1
Tensile Strength Change, %, ASTM D1414	-3.7
Ultimate Elongation Change, %, ASTM D1414	+0.7
Volume Change, %, ASTM D471	+0.9

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ASTM OIL #3 (IRM 903): 70 hrs. @ 302°F (150° C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-1
Tensile Strength Change, %, ASTM D1414	-8.6
Ultimate Elongation Change, %, ASTM D1414	0
Volume Change, %, ASTM D471	+2.8

SERVICE FLUID # 101: 70 hrs. @ 392°F (200° C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-1
Tensile Strength Change, %, ASTM D1414	-7.4
Ultimate Elongation Change, %, ASTM D1414	+3.4
Volume Change, %, ASTM D471	+7.2

STAUFFER BLEND 7700: 70 hrs. @ 392°F (200° C)	Typical Test Results
Hardness Change, Shore A, ASTM D2240	-3
Tensile Strength Change, %, ASTM D1414	-11.6
Ultimate Elongation Change, %, ASTM D1414	+3.1
Volume Change, %, ASTM D471	+8.7

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