Request a Quote

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

Marco Compound # V1138
75 Durometer, Black, FDA and 3-A 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.

Features:
- FDA and 3-A compliant
- Suitable for use in contact with milk and edible oils.
- Excellent resistance to acids, fuels, mineral oils, greases, aliphatic, aromatic and chlorinated hydrocarbons, non-flammable hydraulic fluids (HFD) and many organic solvents and chemicals.
- Low gas permeability, low compression set.

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

Service Temperature:
-15 to 400°F

Specification:

ASTM 2000	2HK 720 A1-10 B37 B38 EF31 EO78 F15
	4HK 720 A1-11 B38 EF31 EO78
	6HK 720 A1-10 A1-11 EF31 EO88 F15

3-A Sanitary Standards 18-03 Class I, II III & IV
CFR21 177.2600

Request a Quote

Original Properties

Modulus @ 100% Elongation	571	psi	3.9	MPa
Tensile Strength	2,408	psi	16.6	MPa
Ultimate Elongation	311	%		
Hardness, Shore A	75	Durometer		
Specific Gravity	1.84	grams/cc		
Brittleness Temperature	-14	°F	-26	°C
Tear Resistance, Die B	194	ppi	34.0	kN/m
Tear Resistance, Die C	167	ppi	29.2	kN/m

Compression Set

Plied: 22 hrs @ RT (73°F, 23°C)	21.0 %
Plied: 22 hrs @ 347°F (175°C)	12.8 %
Plied: 22 hrs @ 392°F (200°C)	15.0 %

HEAT AGED: 70 hrs @ 482°F (250°C)

Change - Tensile Strength	- 7.4 %
Change - Elongation	- 6.4 %
Change - Hardness, Shore A	0

HEAT AGED: 70 hrs @ 527°F (275°C)

Change - Tensile Strength	- 21.3 %
Change - Elongation	+ 17.7 %
Change - Hardness, Shore A	0

STAUFFER BLEND 7700: 70 hrs @ 392°F (200°C)

Change - Tensile Strength	- 29.9 %
Change - Elongation	+ 5.8 %
Change - Hardness, Shore A	- 11
Change - Volume	+ 17.9 %

Request a Quote

DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)	
Change - Hardness, Shore A	0
Change - Volume	+ 2.2 %

ASTM REFERENCE FUEL A: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 4.6 %
Change - Elongation	- 2.3 %
Change - Hardness, Shore A	0
Change - Volume	0.0 %

ASTM REFERENCE FUEL B: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 17.7 %
Change - Elongation	- 6.1 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.7 %

ASTM REFERENCE FUEL C: 70 hrs @ RT (73°F, 23°C)	
Change - Tensile Strength	- 18.0 %
Change - Elongation	+ 1.0 %
Change - Hardness, Shore A	- 2
Change - Volume	+ 4.3 %

ASTM OIL #1 (IRM 901): 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	- 12.5 %
Change - Elongation	- 9.6 %
Change - Hardness, Shore A	0
Change - Volume	+ 0.1 %

ASTM OIL #3 (IRM 903): 70 hrs @ 302°F (150°C)	
Change - Tensile Strength	- 12.4 %
Change - Elongation	+ 4.5 %
Change - Hardness, Shore A	0
Change - Volume	+ 1.4 %

SERVICE FLUID 101: 70 hrs @ 392°F (200°C)	
Change - Tensile Strength	- 23.4 %
Change - Elongation	+ 15.8 %
Change - Hardness, Shore A	- 6
Change - Volume	+ 10.0 %