

Marco Compound # V1118

FKM 70 Durometer, White, FDA Compliant & USP Class VI Certified, ADIF

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. V1118 is Marco's FDA compliant & USP Class VI certified ADIF compound. 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:

- FDA compliant
- USP Class VI certified
- Good steam resistance for steam-in-place (SIP) and clean-in-place (CIP) procedures.
- ADIF (Animal Derived Ingredient Free)
- 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:

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

Service Temperature:

-15 to 437°F (-26 to 225°C)

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

Specifications:

ASTM D2000 2HK 715 A1-10 B37 B38

ASTM D2000 4HK 715 A1-11 B38

ASTM D2000 6HK 715 A1-10 A1-11 B31

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	Typical Test Results
Color	White
Hardness, Shore A	71
Tensile Strength	2,032 psi (14.0 MPa)
Modulus @ 100% Elongation	332 psi (2.3 MPa)
Ultimate Elongation, %	314
Specific Gravity	2.23 grams/cc
Tear Resistance, Die B	85 ppi (14.9 kN/m)
Tear Resistance, Die C	103 ppi (18.0 kN/m)

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.

COMPRESSION SET	Typical Test Results
Plied: 22 hrs @ RT (73°F, 23°C)	9.3%
Plied: 22 hrs @ 347°F (175°C)	10.6%
Plied: 22 hrs @ 392°F (200°C)	14.1%

HEAT AGED: 70 hrs @ 482°F (250°C)	Typical Test Results
Change – Tensile Strength	+19.1%
Change – Elongation	+11.1%
Change – Hardness, Shore A	+2

HEAT AGED: 70 hrs @ 527°F (275°C)	Typical Test Results
Change – Tensile Strength	+16.7%
Change – Elongation	+37.3%
Change – Hardness, Shore A	+2

DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)	Typical Test Results
Change – Tensile Strength	-7.0%
Change – Elongation	+4.5%
Change – Hardness, Shore A	-4
Change – Volume	+4.0%

USP <661> Physicochemical Tests for Plastics	Typical Test Results
	PASS

USP <87> Biological Reactivity Test for Class VI	Typical Test Results
Reactivity: Grade	0

USP <88> Biological Reactivity Test for Class VI	Typical Test Results
	PASS

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Fluorel® is a registered trademark of Dyneon.