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Marco Compound # V1019
70 Durometer, Black, PTFE Internally Lubricated 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 V1019 contains an internal PTFE (Teflon®) lubricant to reduce friction and aid in installation. 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:
- Internally lubricated with PTFE
- 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, amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

Cure System:
Bisphenol

Service Temperature:
-15 to 437°F (-26 to 225°C)
(Additional compounds may be available with expanded temperature ranges).

Specification:
ASTM D2000 2 HK715 A1-10 B37 B38 EF31 EO78
4 HK715 A1-11 B38 EF31 EO78

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	70+/- 5	73
Color	Black	Black
Tensile Strength, MPa (psi), per ASTM D412	10.0 (1,450) min.	11.6 (1,685)
Ultimate Elongation, %, per ASTM D412	175 Min.	346

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 – A1-11, ASTM D 573 (70 hrs. @ 275°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, Shore A, ASTM D2240	+10 (max)	+0
Tensile Strength Change, %, ASTM D412	-40 (max)	-24
Ultimate Elongation Change, %, ASTM D412	-25 (max)	-7.2

COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set %	50 (max)	22

FLUID RESISTANCE – ASTM Fuel C – EF31, ASTM D 471(70 hrs. @ 23°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, Shore A, ASTM D2240	+/- 10	-1
Tensile Strength Change, %, ASTM D412	-25 (max)	-18
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-5.2
Volume Change, %, ASTM D471	0 to + 10	+3.2

FLUID RESISTANCE –ASTM #101 Oil – EO78, ASTM D 471 (70 hrs. @ 200°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Hardness Change, Shore A, ASTM D2240	-15 to + 5	-15
Tensile Strength Change, %, ASTM D412	-40 (max)	-18.1
Ultimate Elongation Change, %, ASTM D412	-20 (max)	+0.6
Volume Change, %, ASTM D412	0 to + 15	16.2

Date: 2016-10-3

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Fluorel® is a registered trademark of Dyneon.

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