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# Marco Compound # V1012 75 Durometer, White, Commercial grade 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. V1012 is Marco's commercial grade compound. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact <a href="mailto:engineering@marcorubber.com">engineering@marcorubber.com</a> for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

## Features:

- High temperature resistance.
- Excellent resistance to acids, fuels, mineral oils, greases, aliphatic, aromatic and chlorinated hydrocarbons, nonflammable 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 437°F

(Additional compounds available with expanded temperature ranges).

## Specification:

ASTM 2000 M6HK810 A1-10 B38 EF31 Z1 Z2

## PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240	75 +/- 5	77
Color (Z2 = White)	White	White
Tensile Strength, psi, ASTM D412	1,440min.	2,100
Ultimate Elongation, %, ASTM D412	150 Min.	170

<b>HEAT RESISTANCE</b> – A1-10, ASTM D 573 (70 hrs. @ 250°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+10 (max)	2
Tensile Strength Change, %, ASTM D412	-25 (max)	-10
Ultimate Elongation Change, %, ASTM D412	-25 (max)	-8

COMPRESSION SET – B38, ASTM D395 Method B (22 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	15 (max)	10

FLUID RESISTANCE - ASTM Fuel C - EF31, ASTM D471(70 hrs. @ 23°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, Shore A, ASTM D2240	+/- 5	-3
Tensile Strength Change, %, ASTM D412	-25 (max)	-12
Ultimate Elongation Change, %, ASTM D412	-20 (max)	-5
Volume Change, %, ASTM D471	0 to + 10	1

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Fluorel® is a registered trademark of Dyneon.