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Marco Compound # V1197 70 Durometer, Red, Commercial Grade FKM Type B 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 V1197 is a Type B FKM which offers expanded chemical resistance and thermal properties. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:

- Type B Polymer
- 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, amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids

Cure System:

Bisphenol

Service Temperature:

-15 to 450° F (-26 to 230° C)

Specification:

ASTM D2000 M2HK708 Z1 Z2 Z3 Z4 Z5

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	Specification Requirements	Typical Test Results
Hardness, Shore A	70	69
Color	Red	Red
Tensile Strength, MPa, (psi)	8.0 (1160) Min.	10.9 (1580)
Ultimate Elongation	250 Min.	410

HEAT RESISTANCE – Z1 (70 hrs. @ 135°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A	+6 Max.	+1
Tensile Strength, MPa (psi)	8.0 (1160) Min.	11.1 (1610)
Ultimate Elongation, %	200 Min.	402
Weight Change, %	-12 Max.	-8.4

HEAT RESISTANCE – Z2 (94 hrs. @ 100°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A	+6 Max.	+1
Tensile Strength, MPa (psi)	7.0 (1015) Min.	9.2 (1135)
Ultimate Elongation, %	200 Min.	352
Weight Change, %	± 6 Max.	+1.4

HEAT RESISTANCE – Z3 (504 hrs. @ 100°C)	Specification Requirements	Typical Test Results
Hardness Change, Shore A	±10 Max.	+1
Tensile Strength, MPa (psi)	8.0 (1160) Min.	10.4 (1510)
Ultimate Elongation, %	150 Min.	330
Weight Change, %	± 10 Max.	+0.3

FLUID RESISTANCE – FAM B – Z4 (48 hrs. @ 23°C)	Specification	Typical Test
	Requirements	Results
Hardness Change, Shore A	-18 Max.	-13
Tensile Strength, MPa (psi)	6.0 (870) Min.	6.2 (900)
Ultimate Elongation, %	100 Min.	382
Weight Change, %	-18 Max.	+6.1

BRITTLENESS TEST – Z5 (24hrs. @ -35°C)	Specification Requirements	Typical Test Results
Visual Inspection	No Cracks	Pass

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Fluorel® is a registered trademark of Dyneon.