Request a Quote

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Marco Compound # V1211

75 Durometer, White-Translucent, Semiconductor Grade FKM

Technical Datasheet

Common Names:
FKM, Fluoropolymer, Fluorel®, Viton®,

General Description:
Marco compound V1211 is a High Purity (HP) peroxide cured FKM material. The V1211 contains an ultrapure organic filler made from nanoparticles of PTFE. This unique filler reacts differently than traditional carbon black or mineral fillers in demanding semiconductor applications and causes very low particle generation. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:

- Very low particle generation (extractables) in semiconductor applications
- Good plasma 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 and low outgassing
- Low compression set

Limitations:

- Steam, hot water, amines, polar solvents, low molecular weight organic solvents and glycol-based brake fluids

Cure System:
Peroxide

Service Temperature:
-15 to 400°F
(Additional compounds may be available with expanded temperature ranges)

Specification:
ASTM D2000 M2HK610 A1-10 B38 Z1 (Z1 = White-Translucent Color)

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A, ASTM D2240 (Z1=75+/-5)	60 +/- 5	58
Color	White-Translucent	White-Translucent
Tensile Strength, MPa (psi), per ASTM D412	10.0 (1450) min.	20.4 (2958)
Ultimate Elongation, %, per ASTM D412	175 Min.	282

HEAT RESISTANCE – 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)	-2.2
Ultimate Elongation Change, %, ASTM D412	-25 (max)	+1
Volume Change, %, ASTM D412	-----	-0.8

COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set %	50 (max)	26

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Fluorel® is a registered trademark of Dyneon.