Request a Quote

(800) 775-6525 Fax: (800) 421-2923
engineering@marcorubber.com
www.marcorubber.com

# Marco Compound # V1013
## 90 Durometer, Black, FDA Compliant 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. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:
- FDA Compliant
- 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 400ºF (-26 to 204º C)

Specification:
ASTM 2000 M3HK910 A1-10 B37 EF31 Z1

## PHYSICAL PROPERTIES

| ORIGINAL PROPERTIES | ASTM D2000 Requirements | Typical Test Results |
|---|---|---|
| Hardness, Shore A, ASTM D2240 (Z1=75+/-5) | 90 +/- 5 | 86 |
| Color | Black | Black |
| Tensile Strength, MPa (psi), per ASTM D412 | 10.0 (1,450) min. | 10.3 (1,493) |
| Ultimate Elongation, %, per ASTM D412 | 100 Min. | 123 |
| Specific Gravity | | 1.98 |

| 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) | +6 |
| Tensile Strength Change, %, ASTM D412 | -25 (max) | -12 |
| Ultimate Elongation Change, %, ASTM D412 | -25 (max) | -23 |

| COMPRESSION SET – B37, ASTM D 395 Method B (22 hrs. @ 175° C) | ASTM D2000 Requirements | Typical Test Results |
|---|---|---|
| Permanent Set % | 40 (max) | 23 |

| 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 | +/- 5 | -5 |
| Tensile Strength Change, %, ASTM D412 | -25 (max) | -21 |
| Ultimate Elongation Change, %, ASTM D412 | -20 (max) | -10 |
| Volume Change, %, ASTM D471 | 0 to + 10 | +8 |

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Fluorel® is a registered trademark of Dyneon.