



## Marco Compound # V1102

### 75 Durometer Black, UL Approved, GFLT Type 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](mailto:engineering@marcorubber.com) for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

**Features:**

- UL Listed for end-use applications involving gasoline, gasoline/alcohol blends up to 15%, naptha, kerosene, manufactured gas and natural gas.
- **Added Flex Fuels resistance.** High temperature resistance. Peroxide cured.
- Added resistance to steam, hot water and extended low temperature range.
- 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:**

- Polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

**Service Temperature:**

-40 to 400° F (-40 to 204°C)

**Specification:**

ASTM D2000 M2HK 710 A1-10 B37 EF31 F17 Z1 Z2

### PHYSICAL PROPERTY STANDARDS

| ORIGINAL PROPERTIES           | ASTM D2000 Requirements | Typical Test Results |
|-------------------------------|-------------------------|----------------------|
| Hardness, Shore A             | 75 +/- 5                | 72                   |
| Color                         | Black                   | Black                |
| Tensile Strength, MPa, ( psi) | 19 min. (1,440)         | 10.0 (1,850)         |
| Ultimate Elongation, %        | 200 min.                | 267                  |

| HEAT RESISTANCE – AIR AGING ASTM D573 (70 hrs. @ 250°C) | ASTM D2000 Requirements | Typical Test Results |
|---|-------------------------|----------------------|
| Hardness Change, Shore A, ASTM D2240                    | +10 (max.)              | +3                   |
| Tensile Strength Change, %, ASTM D412                   | -25 (max)               | -10                  |
| Ultimate Elongation Change, %, ASTM D412                | -25 (max)               | -21                  |

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.

| <b>COMPRESSION SET – ASTM D395 Method B and ASTM D1414 (70 hrs. @ 150° C)</b> | <b>ASTM D2000 Requirements</b> | <b>Typical Test Results</b> |
|---|--------------------------------|-----------------------------|
| Permanent Set %   | 50 (max)                       | 18                          |

| <b>FUEL C IMMERSION – EF31 - ASTM D471 and ASTM D1414 (70 hrs. @ 23°C)</b> | <b>ASTM D2000 Requirements</b> | <b>Typical Test Results</b> |
|--|--------------------------------|-----------------------------|
| Hardness Change, Shore A, ASTM D2240                                       | +/- 5                          | -3                          |
| Tensile Strength Change, %, ASTM D1414                                     | -25                            | -11.2                       |
| Ultimate Elongation Change, %, ASTM D1414                                  | -20                            | +3.9                        |
| Volume Change, %, ASTM D471  | 0 to + 10                      | +3.5                        |

| <b>METHANOL IMMERSION – ASTM D471 (70 hours at 23° C)</b> | <b>ASTM D2000 Requirements</b> | <b>Typical Test Results</b> |
|---|--------------------------------|-----------------------------|
| % Volume change   | 0 to +10                       | +4                          |

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Fluorel® is a registered trademark of Dyneon.