

## Marco Compound # V1082

### 90 Durometer, Black, GLT 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. Marco compound V1082 is a 90 durometer GLT type FKM which offers improved low temperature performance compared to standard FKM materials. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact [sales@marcorubber.com](mailto:sales@marcorubber.com) for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

#### Features:

- Low temperature capabilities
- 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:

Peroxide

#### Service Temperature:

-40 to 437°F (-40 to 225°C)

## PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	Specification Requirements	Typical Test Results
Hardness, Shore A	90 +/- 5	86
Color	Black	Black
Tensile Strength, MPa (psi)	10.0 (1450) min	13.3 (1928)
Ultimate Elongation, %	100 min	105
Specific Gravity	-----	1.82

<b>HEAT AGING – (70 hrs. @ 250°C)</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A	+10 max	+4
Tensile Strength Change, %	-25 max	-6
Ultimate Elongation Change, %	-25 max	+18

<b>COMPRESSION SET – Heat Aging @ 250°C X 70 Hours</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
% Permanent set	50 max	38

<b>FUEL C OIL IMMERSION – (70 Hours @ Room Temperature)</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A	+/- 5	-4
Tensile Strength Change, %	-25 max	-15
Ultimate Elongation Change, %	-20 max	-10
Volume Change, %	0 to + 10	+4

<b>IMMERSION OIL #101 – (70 Hours @ 200° C)</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A	-15 to +5	-8
Tensile Strength Change, %	-40 max	-15
Ultimate Elongation Change, %	-20 max	-12
Volume Change, %	0 to +15	+13

<b>IMMERSION FLUID #2, EHEND 7700 – (70 Hours @ 200° C)</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
Hardness Change, Shore A	---	-13
Tensile Strength Change, %	---	-14
Ultimate Elongation Change, %	---	+16
Volume Change, %	---	+18

<b>OZONE RESISTANCE, TEST METHOD D1171</b>	<b>Specification Requirements</b>	<b>Typical Test Results</b>
40°C for 70 Hrs.	No Cracks	Passed

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