Request a Quote

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Marco Compound # V1176

95 durometer ED resistant FKM for the Gas and Oil Industries
Technical Datasheet

General Description:
Our V1176 high durometer FKM compound has been specifically designed for use in Oil and Gas drilling applications, this material is highly versatile and has a wide range of chemical compatibility.

Features:
- Excellent Explosive decompression 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.
- Superior resistance to RGD reduces maintenance and increases MTB (mean time between failures)

Applications:
- Low temperature and high pressure environments
- Exploration and dripping equipment
- Subsea Valves and pumps
- Compressors

Service Temperature:
-15° to 450° F (-26° to 232° C)

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM	Typical Test Results
Hardness, Shore A	D1415	98
Color		Black
Tensile Strength, MPa (psi)	D412	17.0 (2,450)
Ultimate Elongation, %		95
Compression Set, 22 hrs @392° F @25% deflection, % of original deflection	D395B	12
Compression Set, 70 hrs @392° F @25% deflection, % of original deflection	D395B	16
TR-10	D1329	-15° C

HEAT RESISTANCE – ASTM D 573 (168 hrs. @ 250°C)	ASTM	Typical Test Results
Hardness Change, points	D573	+2
Tensile Strength Change, %	D573	-15
Ultimate Elongation Change, %	D573	-20

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.

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FLUID RESISTANCE – IRM 903 Oil – ASTM D 471 (70 hrs. @ 173°C)	ASTM	Typical Test Results
Hardness Change, points	D471	-2.5
Tensile Strength Change, %	D471	-15
Ultimate Elongation Change, %	D471	-10
Volume Change, %	D471	+2

FLUID RESISTANCE – FUEL C – ASTM D 471 (70 hrs. @ 23°C)	ASTM	Typical Test Results
Hardness Change, points	D471	-2.5
Tensile Strength Change, %	D471	-15
Ultimate Elongation Change, %	D471	-10
Volume Change, %	D471	+2

FLUID RESISTANCE – SERVICE FLUID 101 – ASTM D 471 (70 hrs. @ 175°C)	ASTM	Typical Test Results
Hardness Change, points	D471	-5
Tensile Strength Change, %	D471	-15
Ultimate Elongation Change, %	D471	+15
Volume Change, %	D471	+7.5

FLUID RESISTANCE – IRM902 – ASTM D 471 (168 hrs. @ 70°C)	ASTM	Typical Test Results
Hardness Change, points	D471	-0.5
Weight Change, %	D471	+5

FLUID RESISTANCE – PENTANE – ASTM D 471 (72 hrs. @ 23° C)	ASTM	Typical Test Results
Weight Change, %	D471	+1

AFTER DRYING – ASTM D 1817 (168 hrs. @ 40° C)	ASTM	Typical Test Results
Weight Change, %	D1817	-0.5

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