



Compound # BO-1007 90 Durometer, Black, Commercial Grade 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. BO-1007 is a commercial grade 90 durometer compound for use in higher pressure applications. There are many additional specialty compounds based on A, B, F, GLT, GFLT, LTFE and ETP polymer types. Please contact support.help@bennypass.com for assistance in selecting a specialized compound when increased resistance to temperature, chemicals, or physical properties is required.

Features:

- High temperature resistance.
- High Durometer.
- 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, polar solvents, low molecular weight organic solvents and glycol-based brake fluids.

Cure System:

Bisphenol

Service Temperature:

-15 to 437°F (-26 to 225°C)

(Additional compounds may be available with expanded temperature ranges).

Specification:

ASTM D2000 M2HK910 A1-10 B38 EF31 EO78

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	90 +/- 5	90
Color	Black	Black
Tensile Strength, psi	1,450 min.	1843
Ultimate Elongation, %	100 Min.	128
Specific Gravity	-----	1.833

This information is to the best of our knowledge accurate and reliable. However, bennypass 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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HEAT RESISTANCE – A1-10, ASTM D 573 (70 hrs. @ 250°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+10 (max)	+2
Tensile Strength Change, %	-25 (max)	-3.1
Ultimate Elongation Change, %	-25 (max)	-9.5

COMPRESSION SET – B38, ASTM D 395 Method B (22 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set %	50 (max)	20.7

FLUID RESISTANCE – ASTM Fuel C – EF31, ASTM D471(70 hrs. @ 23°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	+/- 5	-3
Tensile Strength Change, %	-25 (max)	-13.2
Ultimate Elongation Change, %	-20 (max)	-6.7
Volume Change, %	0 to + 10	+2.2

FLUID RESISTANCE – ASTM #101 Oil – EO78, ASTM D471(70 hrs. @ 200°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points	-15 to +5	-9
Tensile Strength Change, %	-40 (max)	-15.8
Ultimate Elongation Change, %	-20 (max)	-8.2
Volume Change, %	0 to + 10	+11.1

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