NES Material Data Sheet MC126 FKM 90 Shore Black



Feb-2019 Revision: 3

MATERIAL FKM 90 Shore Black

ASTM D 2000 M2 HK 915 A1-10 B37B38

DESCRIPTION Low compression set FKM O Ring grade

Copolymer with 66% fluorine content

Cure system is Bisphenol

APPLICATION This material has excellent resistance to oils, fuels, lubricants,

most mineral acids, aliphatic and aromatic hydrocarbons.

TEMPERATURE Low temperature service limit -4°F (-20°C)

Upper temperature continuous service limit +400°F (+204°C)

PRODUCTS Encapsulated Seals

Extrusions (cords/profiles/tubes)

Hot Vulcanised O rings Moulding (custom/O rings)

PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.82
Durometer shore A (slab)	ASTM D2240	90
Elongation % (Dumbbell)	ASTM D412	193
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	2293 (15.8)
Compression set % 22h @ 347°F (175°C) (slab)	ASTM D395B	5.7
Compression set % 22h @ 392°F (200°C) (slab)	ASTM D395B	9.5
Low temperature TR-10°F (°C)*	ASTM D1329	1.4 (-17)

^{*}Nominal value based on a typical 75 shore vulcanizate

HEAT AGEING 70h @ 482° F (250° C) ASTM D573

Durometer change points shore A	+1.34
Elongation change %	-21
Tensile strength change Psi (Mpa)	+64 (0.4)
Weight loss grams	0.11

FLUID IMMERSION Oil No 3 70h @ 302°F (150°C) ASTM D471

Volume change %	+6.11
Durometer change points shore A	-4.6
Elongation change %	-20
Tensile strength change Psi (MPa)	-467 (3.2)

Information

The above information corresponds to our current knowledge and is offered solely to provide possible suggestions for your own experimentations. It is not intended to substitute any testing you may need to conduct to determine suitability of our products for your end use. Northern Engineering reserves the right to revise this information as new knowledge and experience becomes available. Northern Engineering makes no warranties and assumes no liability in connection with any use of the above information.



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