

Data Sheet: FKM80

MATERIAL: FLUOROCARBON 80 SHORE FOR ROTARY SHAFT SEALS

COLOUR: BROWN

GENERAL SERVICE TEMPERATURE RANGE: -20°C to 205°C

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	TEST RESULT
HARDNESS SHORE A	ASTM D2240	78
TENSILE STRENGTH, MPa	ASTM D412C	12.3
ELONGATION %	ASTM D412C	201
TEAR RESISTANCE N/mm	ASTM D624B	31
SPECIFIC GRAVITY	ASTM D297	2.19

COMPRESSION SET

HEAT AGEING 22 hrs @ 175°C %	ASTM D395B	11
HEAT AGEING 22 hrs @ 200°C %	ASTM D395B	16

AIR AGEING 70 hrs @ 250°C

HARDNESS CHANGE, POINTS	ASTM D573	0
TENSILE STRENGTH CHANGE %		-4
ELONGATION CHANGE %		-3
VOLUME CHANGE %		-2.5

AIR AGEING 70 hrs @ 275°C

HARDNESS CHANGE, POINTS	ASTM D573	0+4
TENSILE STRENGTH CHANGE %		-30
ELONGATION CHANGE %		12
VOLUME CHANGE %		-27.1

FLUID RESISTANCE, No.1 Oil, 70 hrs @ 200°C

HARDNESS CHANGE, POINTS	ASTM D471	-9
TENSILE STRENGTH CHANGE %		-22
ELONGATION CHANGE %		8
VOLUME CHANGE %		9.8

FLUID RESISTANCE, OIL 7700 70 hrs @ 200°C

HARDNESS CHANGE, POINTS	ASTM D471	-14
TENSILE STRENGTH CHANGE %		-21
ELONGATION CHANGE %		-3
VOLUME CHANGE %		14.9

FLUID RESISTANCE, Fuel C 70 hrs @ 23°C

HARDNESS CHANGE, POINTS	ASTM D471	-4
TENSILE STRENGTH CHANGE %		-10
ELONGATION CHANGE %		6
VOLUME CHANGE %		4.1

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PHYSICAL PROPERTIES	TEST METHOD	TEST RESULT
FLUID RESISTANCE, OIL No 1, 70 hrs @ 150°C	ASTMD471	
HARDNESS CHANGE, POINTS		-2
TENSILE STRENGTH CHANGE %		1
ELONGATION CHANGE %		-9
VOLUME CHANGE %		1.2
FLUID RESISTANCE, OIL 903 70 hrs @ 150°C	ASTMD471	
HARDNESS CHANGE, POINTS		-2
TENSILE STRENGTH CHANGE %		-1
ELONGATION CHANGE %		-7
VOLUME CHANGE %		1.5
LOW TEMPERATURE RESISTANCE @ -25°C @ 3 Min	ASTMD2137A	Non-Brittle

The above test results are based on test slabs / buttons. The results from the actual parts may be different.

Issue Date: 05.12.2013