

XYFLUOR® 870

Fluorinated Elastomer for Extended Service Life

SEALING SOLUTIONS

Xyfluor® 870, a highly fluorinated elastomer compound, provides excellent chemical compatibility over a wide range of temperatures from -76°F to 450°F (-60°C to 232°C). Recommended for applications demanding a combination of low-temperature properties and chemical resistance, Xyfluor 870 reduces overall cost, as compared to standard Fluoroelastomers, PTFE, and graphite, by extending equipment service life.

Xyfluor 870 parts can be made through high-volume injection-molding processing. Additionally, prototype parts are available for product testing.

FEATURES

- Dependable balance of physical properties at temperatures as low as -76°F (-60°C) and as high as 450°F (232°C)
- Minimal sealing force required for low-sealing pressure applications
- Excellent chemical resistance
- Resistance to hydrocarbon fuels and lubricants
- Good resistance to steam and water
- Less likely to be damaged during installation as compared to PTFE and graphite
- Better conformance to rougher surface finishes as compared to PTFE

APPLICATIONS

Xyfluor is ideal for use in demanding high-volume applications such as mechanical seals and gaskets in a range of metering pumps, valves and other high-performance equipment.



TYPICAL PROPERTIES*

Physical Properties	ASTM Method	Typical Value
Color		Black
Hardness, Shore A, Points	D2240	70
Mechanical		
Compression Set, ** 70 Hours @ 392°F (200°C) @ 25% Deflection, %	D395 Method B	20
Elongation, %	D1414	160
Modulus @ 100% Elongation, psi (MPa)	D1414	550 (3.8)
Tensile Strength, psi (MPa)	D1414	1,100 (7.6)
Thermal		
Service Temperature Range, °F (°C)		-76°F to 450°F (-60°C to 232°C)

* Note: Unless otherwise indicated, all tests are performed on (-214) O-rings.

** Note: Data may vary depending on seal cross section.

Media	Xyfluor	FKM	Silicone	Fluoro-silicone	EPDM
Acetic Acid	1	NR	2/NR	2/NR	2
Acetone	1	NR	3	NR	1
Amyl Alcohol	1	1	NR	1/2	1
Gasoline	1/2	1	NR	1	NR
MEK	1/2	NR	NR	NR	1
Toluene	1	1	NR	2	NR
Steam > 300°F (149°C)	1	NR	NR	NR	2
Water > 180°F (82°C)	1	2	2	1	1

1 = Swell < 10% after exposure. Suitable.

2 = Swell > 10% & < 20% after exposure. Generally suitable.

3 = Swell > 20% & < 40% after exposure. May be suitable in some situations.

NR = Not recommended



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