

Xyfluor® 870

Fluorinated Elastomer for Extended Service Life



Features and Benefits

- 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

Sealing Solutions

Xyfluor® 870, a highly fluorinated elastomer compound, provides excellent chemical compatibility over a wide range of temperatures, -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 manufactured through high-volume injection-molding processing. Prototype parts are available for product testing.

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 Standard)	Typical
Color	Black
Hardness, Shore A, Points (D2240)	70
Mechanical (ASTM Standard)	
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)

* Unless otherwise indicated, all tests are performed on -214 o-rings.
 Note: Data may vary, depending on seal cross-section.

Media	Xyfluor®	FKM	Silicone	Fluorosilicone	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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