M SEALS **PFA-OD63**

Fluorine based plastic

MATERIAL DATA SHEET (Version 6.0 – 05.2022)


Low Temperature


Chemical Resistance


Low moisture absorbtion

Description

M Seals PFA-OD63 material is a copolymer of TetraFluoroEthylene and Perfluoroethers specifically designed to provide corrosion, creep resistance and thermal resistance close to that of PTFE. This material has similar low friction properties comparable to that of PTFE but is somewhat softer and melts at +305°C.

PFA-OD63 is often used for corrosive resistant parts such as liners of vessels and fittings used in aggressive chemical environments.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Opaque
Density	ISO 12086	g/cm^3	2.12-2.17
Hardness	DIN 53505	Shore D	60-65
Tensile strength	DIN 53455	N/mm^2	25-30
Elongation at break	DIN 53455	%	250-350
Water absorption 24 hr	DIN 53495	%	0.02
Coefficient of linear thermal expansion		$1/K.10^{-5}$	13
Thermal conductivity	DIN 52612	W/K.M	0.22
Minimum service temperature		°C	-200
Maximum service temperature		°C	+250
Dielectric strength	DIN 53481	KV/mm	50-80

Main Characteristics

- Low Coefficient of friction
- Good resistance to acids and solvents
- Not Hygroscopic
- Good continous operating temperatures
- Low water absorption

Typical Products

- Bearing rings / guide rings
- Bushes
- Valve seat seals
- Anti-Extrusion / Back-Up Rings
- Cylinder liners

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