

M SEALS PFA-OD63

Fluorine based plastic



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Low Temperature



Chemical Resistance



Low moisture absorption

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 continuous operating temperatures
- Low water absorption

Typical Products

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

Tel: 0044 (0) 114 243 2777 . Fax: 0044 (0) 114 242 2300 . Mail: sales.esd@m-seals.co.uk . Web: www.m-seals.com

M Seals believes that the information above is an accurate description of the typical characteristics and/or uses of the product or products, however M Seals makes no warranty, expressed or implied, that parts manufactured from this / and or any other material will perform satisfactorily in the customers application. It is the customers responsibility to thoroughly test products in their specific application to determine performance, efficiency and safety for each end-use product, device or application. The information and data contained herein are based on standard test pieces according to the corresponding ISO, DIN & ASTM standards and cannot be directly related to finished seals, gaskets or other sealing products and should be used only as a general guide.