

M SEALS ETFE-D67

Fluorine based plastic



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Low Temperature



Chemical Resistance



Low Moisture Absorption

Description

M Seals ETFE-D67 material is a Fluorine based plastic specifically designed to provide increased corrosion and strength resistance over a wide temperature range of -185°C – 150°C. It has excellent resistance to ultra-violet light and high energy radiation. Caution should be taken when utilising ETFE in any application as if burned ETFE releases hydrofluoric acid, which is extremely corrosive and toxic.

ETFE-D67 has the capability to operate and maintain properties at a good temperatures range and is commonly used in the Nuclear industry for bespoke sealing parts.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Opaque
Density	ISO 12086	g/cm ³	1.74-1.80
Hardness	DIN 53505	Shore D	62-72
Tensile strength	DIN 53455	N/mm ²	36-48
Elongation at break	DIN 53455	%	200-350
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	0.17
Minimum service temperature		°C	-100
Maximum service temperature		°C	+150
Dielectric strength	DIN 53481	KV/mm	60-90

Main Characteristics

- Good radiation resistance
- Good resistance to acids and solvents
- Good wear resistance
- Resistant to ultraviolet lights
- Low water absorption

Typical Products

- Bearing rings / guide rings
- Bushes
- Valve seat seals
- Anti-Extrusion / Back-Up Rings
- Bespoke parts

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

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