# M SEALS **ECTFE-OD75**

## Ethylene ChlroTriFluoroEthylene Fluoropolymer

**MATERIAL DATA SHEET (Version 6.0 – 05.2022)**


Low Temperature


Chemical Resistance


Low Moisture Absorbtion

## Description

M Seals ECTFE-OD75 material is a fluoropolymer which is generally chosen for its excellent dimensional stability and mechanical properties. It is stiffer and stronger than many of the other types of fluoropolymer materials and has a low coefficient of thermal expansion and very low moisture absorption.

ECTFE-OD75 has a very smooth surface which makes it a good choice for applications in the pharmaceutical industry where high purity is required.

## Physical Properties

| Property | Test method | Unit | Typical value |
|---|---|---|---|
| Colour | | | Opaque |
| Density | ISO 12086 | $g/cm^3$ | 1.67-1.70 |
| Hardness | DIN 53505 | Shore D | 70-80 |
| Tensile strength | DIN 53455 | $N/mm^2$ | 40-55 |
| Elongation at break | DIN 53455 | % | 30-120 |
| Water absorption 24 hr | DIN 53495 | % | 0.01 |
| Coefficient of linear thermal expansion | | $1/K.10^{-5}$ | 8 |
| Thermal conductivity | DIN 52612 | W/K.M | 0.15 |
| Minimum service temperature | | °C | -75 |
| Maximum service temperature | | °C | +150 |
| Dielectric strength | DIN 53481 | KV/mm | 50-80 |

## Main Characteristics

- Low Coefficient of thermal expansion
- Good mechanical properties
- Very smmoth surface finish
- 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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