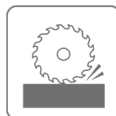


M SEALS PKMT-BLKD85

Black Medical Technology PEEK



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PKMT-BLKD85 material is a high-performance Black pigmented PEEK material that is suitable for medical applications and has excellent resistance to hydrolysis, superheated steam and is particularly useful for steam autoclaving. This material has excellent chemical and thermal resistance, high compressive strength, low wear properties and low creep values.

PKMT-BLKD85 material is commonly used for bespoke customer designed parts and is commonly used in applications requiring its excellent hydrolysis and steam resistance.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183	g/cm ³	1.31
Hardness	ISO 868	Shore D	85
Tensile strength	ISO 527-2	MPa	114
Tensile strength at yield	ISO 527-2	MPa	114
Elongation at break	ISO 527-2	%	13
Flexural strength	ISO 178	Mpa	171
Flexural modulus of elasticity	ISO 178	Mpa	4100
Glass transition temperature *	DIN 53765	°C	+151
Melting temperature	DIN 53765	°C	+341
Service temperature short term **		°C	+300
Service temperature long term **		°C	-50/+260

* (Information found from public sources)

** (Individual testing in application conditions is mandatory)

Main Characteristics

- Excellent thermal resistance
- High creep resistance
- Very good chemical resistance
- Good creep resistance
- Radiation resistance
- Hydrolysis & steam resistance

Typical Products

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

Typical Applications

Due to its excellent chemical and thermal resistance, compressive strength and excellent resistance to hydrolysis and superheated steam, this material is an excellent material choice for applications that require a sterilisable material.

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