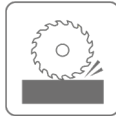


M SEALS PKST-BLKD85

Black High Temperature PEKEKK



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PKST-BLKD85 material is a high-performance black pigmented PEKEKK material (commonly referred to as PEEK-ST or Victrex ST™*) that is suitable for high temperature applications requiring increased mechanical properties while under high thermal loads. It has very good chemical resistance and an increased heat deflection temperature over standard PEEK grades of material.

PKST-BLKD85 material is generally used for bespoke customer designed parts and is commonly used in applications requiring its excellent dimensional stability and high mechanical properties while working in increased temperatures.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183	g/cm ³	1.32
Hardness	ISO 868	Shore D	85
Tensile strength	ISO 527-2	MPa	134
Tensile strength at yield	ISO 527-2	MPa	134
Elongation at break	ISO 527-2	%	13
Flexural strength	ISO 178	Mpa	193
Flexural modulus of elasticity	ISO 178	Mpa	4600
Glass transition temperature **	DIN 53765	°C	+165
Melting temperature	DIN 53765	°C	+384
Service temperature short term ***		°C	+300
Service temperature long term ***		°C	-50/+260

* Victrex and Victrex ST are registered trademarks of Victrex PLC

** (Information found from public sources)

*** (Individual testing in application conditions is mandatory)

Main Characteristics

- Excellent thermal resistance
- Very good chemical resistance
- Increased mechanical properties at elevated temperatures
- Increased heat deflection temperature
- Low moisture absorption

Typical Products

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

Typical Applications

Due to its increased thermal and mechanical properties, heat deflection and very good chemical resistance, this material can be an excellent material choice for applications that require a material to work at high temperatures while under mechanical load.

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