

M SEALS PKV-BLK83-M710

Black Norsok M-710 Compliant Virgin PEEK



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PKV-BLK83-M710 material is a high-performance Norsok M-710 compliant virgin PEEK material which has modified with a black pigment. This material has excellent thermal resistance, high compressive strength, low wear properties and low creep values.

PKV-BLK83-M710 material has been approved in accordance with Norsok M-710 requirements for volume swell, tensile modulus, tensile strength, and elongation at break values. All material changes were within the acceptable limits, making this material suitable for high pressure applications working in sour environments.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183	g/cm ³	1.26-1.32
Hardness	ISO 868	Shore D	80-85
Tensile Strength	ISO 527	MPa	>100
Elongation at break	ISO 527	%	5
Compressive strength	ASTM D695	Mpa	>118
Glass transition temperature *	ASTM D3418	°C	+143
Melting temperature	ASTM D3418	°C	+341
Service temperature short term **		°C	+300
Service temperature long term **		°C	-50/+250

* (Information found from public sources)

** (Individual testing in application conditions is mandatory)

Main Characteristics

- Excellent thermal resistance
- High compressive strength
- Norsok M710 Compliant
- Good creep resistance
- Good wear properties
- 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 thermal resistance, compressive strength and sliding ability, this material is an excellent material choice for applications where standard PEEK materials may not be suitable or where a different colour pigment is required. PKV-BLK83-M710 is commonly used within the Oil and Gas industry due to its Norsok M-710 compliance.

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