

M SEALS PKV-CRD86-M710

Norsok M-710 Compliant Unreinforced Virgin PEEK



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Description

M Seals PKV-CRD86-M710 material is a high-performance Norsok M710 compliant unreinforced virgin PEEK material. This material has excellent thermal resistance, high compressive strength, low wear properties and low creep values.

PKV-CRD86-M710 material is commonly used for anti-extrusion/back-up rings, guide rings, wear rings, bushes, valve seat seals, scraper seals and other applications requiring excellent thermal, chemical, hydrolysis and steam resistance.

Physical Properties

Property	Test method	Unit	Typical value	
Type			SM	CM
Colour			Beige	Beige
Density	ISO 1183	g/cm ³	1.31	1.31
Hardness	ISO 868	Shore D	≥82	90
Tensile Strength	ISO 527-2	MPa	≥95	115
Tensile strength at yield	ISO 527-2	MPa	-	115
Elongation at break	ISO 527-2	%	≥10	14
Flexural strength		Mpa	≥140	
Modulus of elasticity		Mpa	-	4700
Glass transition temperature *	DIN 53765	°C	+143	+143
Melting temperature	DIN 53765	°C	+343	+343
Service temperature short term **		°C	+300	+300
Service temperature long term **		°C	-50/+250	+260

* (Information found from public sources)

** (Individual testing in application conditions is mandatory)

SM= Special moulding technique

CM= Compression moulding technique

Main Characteristics

- Excellent thermal resistance
- High compressive strength
- Good sliding ability
- 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 low creep properties, this material is an excellent material choice for oil & gas applications where high temperature and high pressures are seen.

PKV-CRD86-M710 is frequently used within the Oil and Gas industry due to its Norsok M710 compliance.

PLEASE NOTE: If Norsok M-710 compliance is required, a 3.1 material certificate must be purchased and this requirement must be confirmed at time of order placement. This is due to different processes required at the manufacturing stage to achieve Norsok M-710 compliance.

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