TECAPEEK IM PVX black - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEEK (Polyetheretherketone)

Colour
black opaque

Density
1.45 g/cm^3

Fillers
carbon fibres, graphite, PTFE

Main features
- very good chemical resistance
- inherent flame retardant
- good heat deflection temperature
- hydrolysis and superheated steam resistant
- good machinability
- good slide and wear properties

Target Industries
- oil and gas industry
- chemical technology
- energy industry
- mechanical engineering

Mechanical properties	*parameter*	*value*	*unit*	*norm*		*comment*
Tensile strength	50mm/min	150	MPa	DIN EN ISO 527-2	1)	(1) For tensile test: specimen type 1b (2) For flexural test: support span 64mm, norm specimen.
Modulus of elasticity (tensile test)	1mm/min	13000	MPa	DIN EN ISO 527-2		
Elongation at break (tensile test)	50 mm/min	2.3	%	DIN EN ISO 527-2		
Flexural strength	2mm/min, 10 N	230	MPa	DIN EN ISO 178	2)	
Modulus of elasticity (flexural test)	2mm/min, 10 N	11500	MPa	DIN EN ISO 178		
Shore hardness		83		DIN EN ISO 868		

Thermal properties	*parameter*	*value*	*unit*	*norm*		*comment*
Glass transition temperature		150	°C	DIN EN ISO 11357	1)	(1) Found in public sources. (2) Found in public sources. Individual testing regarding application conditions is mandatory.
Melting temperature		341	°C	DIN EN ISO 11357		
Service temperature	short term	300	°C	-	2)	
Service temperature	long term	300	°C	-		

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. As the properties depend on the dimensions of the semi-finished products and the orientation in the component (esp. in reinforced grades), the material may not be used without a separate testing under individual circumstances. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com. Technical changes reserved.

Ensinger GmbH
Rudolf-Diesel Str. 8
71154 Nufringen - Deutschland

Tel +49 7032 819 0
Fax +49 7032 819 100
ensingerplastics.com

Date: 2018/02/22

Version: AA