TECAPEEK MT XRO blue - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEEK (Polyetheretherketone)

Colour
blue opaque

Density
1.39 g/cm^3

Fillers
barium sulfate

Main features
- high creep resistance
- x-ray opaque
- good chemical resistance
- good slide and wear properties
- resistance against high energy radiation
- very good stress cracking resistance
- hydrolysis and superheated steam resistant
- very good sterilisable

Target Industries
- medical technology
- food technology
- mechanical engineering

Mechanical properties	*parameter*	*value*	*unit*	*norm*		*comment*
Tensile strength	50mm/min	120	MPa	DIN EN ISO 527-2		(1) For tensile test: specimen type 1b (2) For Charpy test: support span 64mm, norm specimen. n.b. = not broken
Modulus of elasticity (tensile test)	1mm/min	4500	MPa	DIN EN ISO 527-2	1)	
Elongation at break (tensile test)	50mm/min	10	%	DIN EN ISO 527-2		
Impact strength (Charpy)	max. 7,5J	n.b.	kJ/m^2	DIN EN ISO 179-1eU	2)	
Notched impact strength (Charpy)	max. 7,5J	5.7	kJ/m^2	DIN EN ISO 179-1eA		
Shore hardness	D	91		DIN EN ISO 868		

Thermal properties	*parameter*	*value*	*unit*	*norm*		*comment*
Melting temperature		342	°C	DIN 53765		(1) Found in public sources. Individual testing regarding application conditions is mandatory.
Service temperature	short term	300	°C	-	1)	
Service temperature	long term	260	°C	-		

- TECAPEEK products are based on Victrex® PEEK polymer.

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. Unless otherwise noted, these values were determined by tests at reference dimensions (typically rods with diameter 40-60 mm according to DIN EN 15860) on extruded and machined specimen. 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.

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Date: 2024/11/14

Version: AC