TECAPEEK SM Natural - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEEK (Polyetheretherketone)

Colour
beige opaque

Density
1.31 g/cm^3

Main features
- electrically insulating
- high thermal and mechanical capacity
- hydrolysis and superheated steam resistant
- good chemical resistance
- flame retardant according to UL94 V-0
- good machinability
- good slide and wear properties
- resistant to many solvents

Target Industries
- oil and gas industry
- chemical technology
- mechanical engineering
- electrical engineering
- aircraft and aerospace technology
- automotive industry
- semiconductor technology
- vacuum technology
- textile industry

Mechanical properties	*condition*	*value*	*unit*	*test method*	*comment*
Tensile strength		102	MPa	DIN EN ISO 527-2	
Modulus of elasticity (tensile test)		3520	MPa	DIN EN ISO 527-2	
Tensile strength at yield		102	MPa	DIN EN ISO 527-2	
Elongation at yield (tensile test)		3.6	%	DIN EN ISO 527-2	
Elongation at break (tensile test)		19	%	DIN EN ISO 527-2	
Flexural strength		164	MPa	-	
Modulus of elasticity (flexural test)		3670	MPa	-	
Shore hardness	D scale	88		-	

Thermal properties	*condition*	*value*	*unit*	*test method*		*comment*
Glass transition temperature		150	°C	DIN 53765	1)	(1) Public Source (2) Public Source; Individual testing recommended
Melting temperature		341	°C	-		
Service temperature	short term	300	°C	-	2)	
Service temperature	Long Term	260	°C	-		

- TECAPEEK products are based on Victrex® PEEK polymer.

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