

TECAPEEK SM Natural - Stock Shapes

Chemical Designation

PEEK (Polyetheretherketone)

Colour

beige opaque

Density

1.31 g/cm³

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

Date: 2015/09/03

Mechanical properties	condition	value		test method		comment	
Modulus of elasticity (tensile test)		3520	MPa	DIN EN ISO 527-2			
Tensile strength		102	MPa	DIN EN ISO 527-2			
Tensile strength at yield		102	MPa	DIN EN ISO 527-2	_		
Elongation at yield		3.6	%	DIN EN ISO 527-2			
Elongation at break		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		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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