

TECAPEEK SM natural

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
- food engineering
- automotive industry
- semiconductor technology
- vacuum technology
- textile industry

Mechanical properties	parameter	value	unit	norm	comment
	Modulus of elasticity (tensile test)	3520	MPa	BS EN ISO 527-2	
	Tensile strength	102	MPa	BS EN ISO 527-2	
	Tensile strength at yield	102	MPa	BS EN ISO 527-2	
	Elongation at yield	3.6	%	BS EN ISO 527-2	
	Elongation at break	19	%	BS EN ISO 527-2	
	Flexural strength	164	MPa		
	Modulus of elasticity (flexural test)	3670	MPa		
	Shore D hardness	88		BS EN ISO 868	

Thermal properties	parameter	value	unit	norm	comment
	Glass transition temperature	150	°C	DIN 53765	1)
	Melting temperature	341	°C		
	Service temperature	short term	300	°C	2)
	Service temperature	long term	260	°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.