

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		



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