

TECAPEEK IM PVX black - Stock Shapes (rods, plates, tubes)

Chemical Designation

PEEK (Polyetheretherketone)

Colour

black opaque

Density

1.45 g/cm³

Fillor

carbon fibres, graphite, PTFE

Main features

- → very good chemical resistance
- → inherent flame retardant
- → good heat deflection temperature
- hydrolysis and superheated steam resistant
- → good machinability
- → good slide and wear properties

Target Industries

- → oil and gas industry
- → chemical technology
- → energy industry

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→ mechanical engineering

Mechanical properties	parameter	value	unit	norm		comment	
Tensile strength	50mm/min	150	MPa	DIN EN ISO 527-2	1)	(1) For tensile test: specimen type 1b (2) For flexural test: support span 64mm, norm specimen.	
Modulus of elasticity (tensile test)	1mm/min	13000	MPa	DIN EN ISO 527-2			
Elongation at break (tensile test)	50 mm/min	2.3	%	DIN EN ISO 527-2			
Flexural strength	2mm/min, 10 N	230	MPa	DIN EN ISO 178	2)		
Modulus of elasticity (flexural test)	2mm/min, 10 N	11500	MPa	DIN EN ISO 178			
Shore hardness		83	_	DIN EN ISO 868			
Thermal properties	parameter	value	unit	norm	-	comment	
Glass transition temperature		150	°C	DIN EN ISO 11357	1)	(1) Found in public sources. (2) Found in public sources. Individual testing regarding application conditions is mandatory.	
Melting temperature		341	°C	DIN EN ISO 11357			
Service temperature	short term	300	°C	-	2)		
Service temperature	long term	300	°C	-			

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