

TECAPEEK CM MT black (XP98MT) - Stock Shapes (rods, plates, tubes)

Chemical Designation

PEEK (Polyetheretherketone)

Colour

black

Density

1.43 g/cm³

Fillers

30% carbon fibres

Main features

excellent strength
broad chemical compatibility
good dimensional stability
high stiffness

Target Industries

oil and gas industry
chemical and refinery industry

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength	@73°F	19,000	psi	ASTM D 638	(1) Units = Rockwell M
Modulus of elasticity (tensile test)	@73°F	1,840,000	psi	ASTM D 790	
Elongation at yield (tensile test)	@73°F	2.3	%	ASTM D 638	
Elongation at break (tensile test)	@73°F	2.5	%	ASTM D 638	
Flexural strength	@73°F	32,500	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@73°F	1,600,000	psi	ASTM D 790	
Compression strength	@ 73°F; @10%	32000	psi	ASTM D 695	
Compression strength	@ 1%	7,700	psi	ASTM D 695	
Compression modulus	@ 73°F	770,000	psi	ASTM D 695	
Impact strength (Izod)	@73°F	1.00	ft-lbs/in	ASTM D 256	
Shore hardness	@ 73°F; D Scale	93		ASTM D 2240	
Rockwell hardness	@ 73°F	102		ASTM D 785	1)
Shear strength	@73°F	13,000	psi	-	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Melting temperature		649	°F	-	
Heat distortion temperature		>459	°F	ASTM D 648	

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