TECAPEEK CM XP111 black - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEEK (Polyetheretherketone)

Colour
black

Density
1.5 g/cm^3

Fillers
carbon fibres

Main features
- excellent strength
- broad chemical compatibility
- good dimensional stability
- high stiffness

Target Industries
- oil and gas industry
- chemical and refinery industry

Mechanical properties	*condition*	*value*	*unit*	*test method*	*comment*
Tensile strength	@ 73°F	18,700	psi	ASTM D 638	
Modulus of elasticity (tensile test)	@ 73°F	2,600,000	psi	ASTM D 790	
Elongation at break (tensile test)	@ 73°F	1.45	%	ASTM D 638	
Flexural strength	@ 73°F	22,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73°F	2,000,000	psi	ASTM D 790	
Compression strength	@ 73°F; @10% strain	35,000	psi	ASTM D 695	
Compression strength	@73°F; 1% strain	8,900	psi	ASTM D 695	
Compression modulus	@ 73°F	840,000	psi	ASTM D 695	
Impact strength (Izod)	@ 73°F	0.87	ft-lbs/in	ASTM D 256	
Rockwell hardness	@ 73°F; M Scale	110		ASTM D 785	
Shore hardness	@73°F; D scale	94		ASTM D 2240	

Thermal properties	*condition*	*value*	*unit*	*test method*	*comment*
Melting temperature		649	°F	-	

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