TECAPEEK CM XP100 black - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEEK (Polyetheretherketone)

Colour
black

Density
1.47 g/cm^3

Fillers
10% carbon fibres, 10% graphite, 10% PTFE

Main features
- excellent wear properties
- excellent chemical resistance
- high creep resistance
- hydrolysis and superheated steam resistant
- inherent flame resistance

Target Industries
- mechanical engineering
- conveyor technology
- automotive industry
- aircraft and aerospace technology
- precision engineering

Mechanical properties	*condition*	*value*	*unit*	*test method*	*comment*
Tensile strength	@73°F	9,400	psi	ASTM D 638	
Modulus of elasticity (tensile test)	@73°F	1,100,000	psi	ASTM D 638	
Elongation at break (tensile test)	@73°F	1.5	%	ASTM D 638	
Flexural strength	@73°F	16,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@73°F	900,000	psi	ASTM D 790	
Compression strength	@73°F	19,200	psi	ASTM D 695	
Compression modulus	@73°F	330,000	psi	ASTM D 695	
Impact strength (Izod)	@73°F, notched	.44	ft-lbs/in	ASTM D 256	
Rockwell hardness	M scale	90		ASTM D 785	

Thermal properties	*condition*	*value*	*unit*	*test method*	*comment*
Melting temperature		649	°F	-	
Thermal expansion (CLTE)		3.12*10^{-5}	in/in/°F	ASTM D 696	

Other properties	*condition*	*value*	*unit*	*test method*	*comment*
Moisture absorption	@ 24 hrs	0.06	%	ASTM D 570	

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