

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

### Chemical Designation

PEEK (Polyetheretherketone)

### Colour

black

### Density

1.47 g/cm<sup>3</sup>

### 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

<i>Mechanical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
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	
<i>Thermal properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Melting temperature		649	°F	-	
Thermal expansion (CLTE)		3.12*10 <sup>-5</sup>	in/in/°F	ASTM D 696	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Moisture absorption	@ 24 hrs	0.06	%	ASTM D 570	

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at [www.ensingerplastics.com](http://www.ensingerplastics.com).