

TECAPEEK CM XP98 black - Stock Shapes

Chemical Designation

PEEK (Polyetheretherketone)

Colour

black

Density

1.43 g/cm³

Fillers

30% carbon fibres

Main features

- very good chemical resistance
- good heat deflection temperature
- inherent flame resistance
- hydrolysis and superheated steam resistant
- very high stiffness
- very high creep resistant
- high dimensional stability
- resistance against high energy radiation

Target Industries

- aircraft and aerospace technology
- automotive industry
- conveyor technology
- oil and gas industry
- mechanical engineering
- chemical plant engineering

Mechanical properties	condition	value		test method	comment
Modulus of elasticity (tensile test)	@73°F	1,400,000	psi	ASTMD 638	(1) ASTM D732
Tensile strength	@73°F	18,300	psi	ASTMD 638	
Elongation at break	@73°F	2.2	%	ASTMD 638	
Flexural strength	@73°F	30,500	psi	ASTMD 790	
Modulus of elasticity (flexural test)	@73°F	1,600,000	psi	ASTMD 790	
Compression strength	@73°F, 10% strain	26,000	psi	ASTMD 695	
Compression modulus	@73°F	600,000	psi	ASTMD 695	
Impact strength (Izod)	@73°F, notched	1.03	ft-lbs/in	ASTMD 256	
Rockwell hardness	M scale	102		ASTMD 785	
Shear strength	@73°F	12,100	psi	-	1)
Thermal properties	condition	value		test method	comment
Melting temperature		649	°F	-	(1) Obtained from public source
Service temperature	Short Term	572	°F	-	1) (2) Obtained from public source
Service temperature	Long Term	500	°F	-	2)
Thermal expansion (CLTE)		1.6*10 ⁻⁵	in/in/°F	-	
Other properties	condition	value		test method	comment
Moisture absorption	@ 24 hrs	0.05	%	ASTMD 570	

→ Resin specification:
ASTMD4000-11 PEEK0000C30G85300
Shapes specification:
ASTM D6262-12 S-PAEK0130

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