TECAPEI™ CM ELS XP680 black - Stock Shapes (rods, plates, tubes)

Chemical Designation
PEI (Polyetherimide)

Colour
black

Density
1.33

Fillers
carbon based fillers

Target Industries
- chemical technology
- semiconductor technology

Mechanical properties	*condition*	*value*	*unit*	*test method*		*comment*
Modulus of elasticity (tensile test)	@73 F	435,000	psi	ASTM D 638	1)	(1) Type V specimen (2) Type V specimen (3) Type V specimen (4) ASTM D732
Tensile strength at break	@73 F	10,000	psi	ASTM D 638	2)	
Elongation at break (tensile test)	@73 F	3.0	%	ASTM D 638	3)	
Flexural strength	@73 F	11,800	psi	ASTM D 790		
Modulus of elasticity (flexural test)	@73 F	409,000	psi	ASTM D 790		
Elongation at break (flexural test)	@73 F	3.5	%	ASTM D 790		
Compression strength	@1% strain	3425	psi	ASTM D 695		
Compression strength	@10% strain	19,845	psi	ASTM D 695		
Compression modulus		383,000	psi	ASTM D 695		
Impact strength (Izod)	notched	0.42	ft-lbs/in	ASTM D 256		
Shore hardness	D scale	83		ASTM D 2240		
Shear strength	@73 F	7,500	psi	-	4)	

Thermal properties	*condition*	*value*	*unit*	*test method*	*comment*
Glass transition temperature		425	°F	-	

Electrical properties	*condition*	*value*	*unit*	*test method*	*comment*
surface resistivity	@73 F 10 V	≤ 10^4	Ω/square	ASTM D 257	

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