

TECATRON PPS CM GF40 black (XP64) - Stock Shapes (rods, plates, tubes)

Chemical Designation
PPS (Polyphenylsulfide)

Main features
high stiffness
excellent chemical resistance

Target Industries
oil and gas industry
others

Colour
black

Density
1.72 g/cm³

Fillers
40% glass fibres

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength		8,300	psi	ASTM D 638	
Modulus of elasticity (tensile test)	@73°F	1,355,000	psi	ASTM D 638	
Elongation at break (tensile test)	@73°F	1.3	%	ASTM D 638	
Flexural strength		14,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@73°F	1,230,000	psi	ASTM D 790	
Compression strength	Max Load	19,500	psi	ASTM D 695	
Compression strength	@ 10%	20,000	psi	ASTM D 695	
Compression strength	@ 1%	7,800	psi	ASTM D 695	
Compression modulus	@73°F	700,000	psi	ASTM D 695	
Impact strength (Izod)	notched	0.45	ft-lbs/in	ASTM D 256	
Shore hardness	D Scale	90		ASTM D 2240	
Thermal properties	parameter	value	unit	norm	comment
Melting temperature		543	°F	-	1) (1) DSC
Deflection temperature		234	°F	ASTM D 648	
Electrical properties	parameter	value	unit	norm	comment
Volume resistivity		2.91	Ω*cm	ASTM D 257	
Dielectric strength		23.3	kV/mm	ASTM D 149	
Dielectric constant	500Hz, 200°C	4.58		ASTM D 150	
Other properties	parameter	value	unit	norm	comment
Moisture absorption		0.03	%	ASTM D 570	

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