

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

Chemical Designation

PPS (Polyphenylsulfide)

Colour

dark brown opaque

Density

1.7 g/cm³

Fillers

40% glass fibres

production process: compression moulding

Main features

- high dimensional stability
- good chemical resistance
- high creep resistance
- good heat deflection temperature
- resistance against high energy radiation
- high stiffness
- high strength

Target Industries

- oil and gas industry

<i>Mechanical properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Tensile strength		8,000	psi	ASTM D 638	
Modulus of elasticity (tensile test)		1,300,000	psi	ASTM D 638	
Elongation at break (tensile test)		1.2	%	ASTM D 638	
Flexural strength	@73°F	13,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)		1,250,000	psi	ASTM D 790	
Compression strength	@ 10%	21,000	psi	ASTM D 695	
Compression strength	@ 1%	8,000	psi	ASTM D 695	
Compression modulus		650,000	psi	ASTM D 695	
Impact strength (Izod)		.5	ft-lbs/in	ASTM D 256	
Shore hardness	Shore D	90		ASTM D 2240	
Rockwell hardness	M Scale	82		ASTM D 785	
<i>Thermal properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Heat distortion temperature		234	°F	ASTM D 648	
Thermal expansion (CLTE)		28*10 ⁻⁶	°F	ASTM D 696	
<i>Electrical properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Dielectric strength		233	V/mil	ASTM D 149	
<i>Other properties</i>	<i>condition</i>	<i>value</i>	<i>unit</i>	<i>test method</i>	<i>comment</i>
Moisture absorption	@ 24 hrs	.063	%	ASTM D 570	

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