

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

## Chemical Designation

PPS (Polyphenylsulfide)

## Colour

dark brown opaque

## Density

1.7 g/cm<sup>3</sup>

## 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>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</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	@ 1%	8,000	psi	ASTM D 695	
Compression strength	@ 10%	21,000	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>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Heat distortion temperature		234	°F	ASTM D 648	
Thermal expansion (CLTE)		28*10 <sup>-6</sup>	°F	ASTM D 696	
<i>Electrical properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Dielectric strength		233	V/mil	ASTM D 149	
<i>Other properties</i>	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Moisture absorption	@ 24 hrs	.063	%	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).