TECASON P MT XRO® black - Stock Shapes (rods, plates, tubes)

Chemical Designation
PPSU (Polyphenylsulfone)

Colour
black

Density
1.36 g/cm^3

Fillers
barium sulfate

Main features
- x-ray opaque
- high thermal and mechanical capacity
- good heat deflection temperature
- hydrolysis and superheated steam resistant
- good impact strength
- high gamma radiation resistance
- good chemical resistance
- high strength

Target Industries
- medical technology

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	420,000	psi	ASTM D 638	
Tensile strength at yield	@ 73 °F	11,500	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	35	%	ASTM D 638	
Flexural strength	@ 73 °F	18,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	350,000	psi	ASTM D 790	
Compression strength	@1% strain, 73 °F	1,750	psi	ASTM D 695	
Compression strength	@ 73 °F, 10% strain	13,700	psi	ASTM D 695	
Compression modulus	@ 73 °F	225,000	psi	ASTM D 695	
Impact strength (Izod)	@ 73 °F	1.6	ft-lbs/in	ASTM D 256	
Rockwell hardness	@ 73 °F, R scale	126		ASTM D 785	
Rockwell hardness	@ 73 °F, M scale	92		ASTM D 785	

Thermal properties	condition	value	unit	test method		comment
Service temperature	Long Term	300	°F	-	1)	(1) Data obtained from public source

Other properties	condition	value	unit	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.19	%	ASTM D 570	

- Resin specification:
  ASTM D 6394-21 SP0311
  Shapes specification:
  none

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