

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

Chemical Designation

PPSU (Polyphenylsulfone)

Colour

bone

Density

1.36 g/cm³

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 6394-10 SP0311
Shapes specification:
NONE

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.

Ensinger Inc. Headquarters
365 Meadowlands Boulevard
Washington, PA 15301, USA

Phone 800-243-3221 Sales
Phone 800-869-4029 Technical
Fax 724-746-9209
sales@ensingerusa.com

Date: 2016/02/08

Version: A1