

TECASON® P MT

(POLYPHENYLSULONE - PPSU)


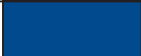

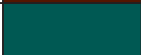
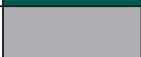
TECASON® P MT is a polyphenylsulfone suited primarily to applications in the medical industry. It is in the same performance category as products like Polysulfone and ULTEM® polyetherimide.







TECASON® P MT has improved performance in terms of temperature, impact strength and chemical resistance. TECASON® P MT also has exceptional resistance to repeated steam autoclaving without loss of dimensional

stability or physical properties. TECASON® P MT is available in several colored and transparent grades, as well as with our x-ray opaque XRO additive which allows for clear component visibility on fluoroscopy and x-ray.

- **Tested to the requirements of ISO 10993**
- **High tensile strength**
- **Excellent heat resistance, Autoclavable**
- **Very high resistance to environmental stress**
- **Great mechanical strength**
- **High dielectric strength and stability**
- **Available in opaque and transparent grades**

COLORS*

Black	BK085 or 937*	
Blue	BL033	
Brown	BN029	
Green	GN4-232** or GN083	
Gray	GY061	

Rust	OR2-773** or BN102	
Purple	RDI638** or PL028	
Orange	OR042	
Yellow	YL3-528 or YL103	
Red	RD099	
Bone	NT15* or WT265	

*Colors may vary slightly from printed examples

TECASON® P MT series products are targeted at a number of applications in the medical industry. TECASON® P MT is often used in applications for surgical tools and instruments because of its resistance to autoclave sterilization damage. A second market for TECASON®, it is also a popular material choice for trials used in joint replacement surgeries.

TYPICAL PROPERTY VALUES

	PROPERTIES	ASTM Test Method	Units	TECASON® PMT	
PHYSICAL	Density	D792	lbs/in ³	0.0466	
	Specific Gravity	D792	-	1.29	
	Water Absorption, @ 24 hours, 73°F	D570	%	0.37	
	@ Saturation, 73°F	D570	%	1.1	
MECHANICAL	Tensile Strength @ Yield, 73°F	D638	psi	10,100	
	Tensile Modulus	D639	psi	340,000	
	Elongation @ Break, 73°F	D638	%	60	
	Flexural Strength, 73°F	D790	psi	13,200	
	Flexural Modulus, 73°F	D790	psi	350,000	
	Compressive Strength	D695	psi	14,350	
	Izod Impact Strength, 73°	D256	ft-lb/in	13	
	Rockwell Hardness, 73°F	D785	R Scale	R123	
	Shure Hardness	-	D Scale	-	
	Wear Factor Against Steel, 40 psi, 50 fpm	D3702	in ³ x $\frac{1}{hr}$	PV	-
	Static Coefficient of Friction	D3702	-	-	-
	Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702	-	-	-
	THERMAL	Heat Deflection Temperature @ 66 psi	D648	°F	417
@ 264 psi		D648	°F	405	
Coefficient of Linear Thermal Expansion		D696	in/in/°F	3.1x10 ⁻⁵	
Maximum Servicing Temperature, Intermittent		-	°F	360	
Long Term		UL746B	°F	-	
Specific Heat		-	BTU/lb-°F	0.27	
Thermal Conductivity		-	-	-	
Vicat Softening Point		-	°F	424	
Melting Point		D2133	°F	-	
Flammability	UL94	-	V-0		
ELECTRICAL	Surface Resistivity	D257	Ohm/square	-	
	Volume Resistivity	D257	ohm-cm	1 x 10 ¹⁵	
	Dielectric Strength	D149	V/mil	360	
	Dielectric Constant, @ 60Hz, 73°F, 50% RH	D150	-	3.44	
	@ 1MHz	D150	-	-	
	@ 20GHz	D150	-	-	
	@ 30GHz	D150	-	-	
	Dissipation Factor, @ 60Hz, 73°F	D150	-	-	

This information is only to assist and advise you on current technical knowledge and is given without obligation or liability. All trade and patent rights should be observed. All rights reserved. Data obtained from injection molded samples. TECASON® P MT - Ensinger, Inc.

MATERIAL AVAILABILITY

Rods: Diameters: 1" to 3-1/2"
Length: 4' and 8'

Primary Specification (Typical) (Resin)

ASTM-D-6394 SP0311

Profiles, tubes, and special sizes are custom-produced on request.



DISTRIBUTED BY

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