TECASON™ P MT

Polyphenylsulfone

Ensinger Inc.

Message:

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® PMT 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 fluorscopy and x-ray.

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.

General Information				
Features	High ESCR (Stress Cracking Resistance)			
	High tensile strength			
	High strength			
	High pressure heating resistance			
	Heat resistance, high			
Uses	Surgical instruments			
	Medical/nursing supplies			
Appearance	Opacity			
	Available colors			
	Clear/transparent			
Forms	Shapes			
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	1.29	g/cm³	ASTM D792	
Water Absorption			ASTM D570	
23°C, 24 hr	0.37	%	ASTM D570	
Saturated, 23°C	1.1	%	ASTM D570	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (R-Scale, 23°C)	123		ASTM D785	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus	2340	MPa	ASTM D638	
Tensile Strength (Yield, 23°C)	69.6	MPa	ASTM D638	
Tensile Elongation (Break, 23°C)	60	%	ASTM D638	
Flexural Modulus (23°C)	2410	MPa	ASTM D790	
Flexural Strength (23°C)	91.0	MPa	ASTM D790	
Compressive Strength	98.9	MPa	ASTM D695	

Impact	Nominal Value	Unit	Test Method	
Unnotched Izod Impact	690	J/m	ASTM D256	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load			ASTM D648	
0.45 MPa, not annealed	214	°C	ASTM D648	
1.8 MPa, not annealed	207	°C	ASTM D648	
Vicat Softening Temperature	218	°C		
CLTE - Flow (-40 to 38°C)	5.6E-5	cm/cm/°C	ASTM D696	
Specific Heat	1130	J/kg/°C	ASTM C351	
Maximum Service Temperature - Intermittent	182	°C		
Electrical	Nominal Value	Unit	Test Method	
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257	
Dielectric Strength	14	kV/mm	ASTM D149	
Dielectric Constant ¹ (23°C, 60 Hz)	3.44		ASTM D150	
Flammability	Nominal Value	Unit	Test Method	
Flame Rating	V-0		UL 94	
Additional Information				
Data obtained from injection molded samples.				
NOTE				
1.	50% RH			

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

