TECAPEEK® GF30

Polyetheretherketone

Ensinger Inc.

Message:

TECAPEEK® GF30 is Ensinger's 30% glass fiber reinforced TECAPEEK product. Made with Victrex 450 GL30 PEEK polymer, it offers enhanced mechanical and thermal properties over those of our basic TECAPEEK offering. It also offers excellent resistance in harsh chemical environments and is electrically insulative.

TECAPEEK[™]s exceptional property profile enables it to be utilized in many of the most critical areas in general industry, as well as in the automotive, marine, nuclear, oil well, electronics, medical and aerospace fields.

General Information				
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight			
Features	Good dimensional stability Low smoke			
	Insulation			
	Anti-gamma radiation			
	Good wear resistance			
	Good chemical resistance			
	Good wear resistance			
	Heat resistance, high			
	Hydrolysis resistance			
Uses	Ship application Electrical/Electronic Applications			
	Industrial application			
	Aerospace applications			
	Nuclear energy applications Application in Automobile Field			
	Oil/Gas Supplies			
	Medical/nursing supplies			
Forms	Shapes			
Physical	Nominal Value	Unit	Test Method	
Specific Gravity	1.53	g/cm ³	ASTM D792	
Water Absorption (23°C, 24 hr)	0.11	%	ASTM D570	
Hardness	Nominal Value	Unit	Test Method	
Rockwell Hardness (M-Scale)	103		ASTM D785	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus - 1% Secant (23°C)	9700	MPa	ASTM D638	
Tensile Strength (Yield, 23°C)	157	MPa	ASTM D638	
Tensile Elongation (Break, 23°C)	2.2	%	ASTM D638	

Flexural Modulus (23°C)	10300	MPa	ASTM D790	
Flexural Strength (23°C)	233	MPa	ASTM D790	
Compressive Strength (23°C)	215	MPa	ASTM D695	
Shear Strength (23°C)	97.2	MPa	ASTM D3846	
Coefficient of Friction ¹	0.30			
Impact	Nominal Value	Unit	Test Method	
Notched Izod Impact (23°C)	96	J/m	ASTM D256	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load (1.8				
MPa, Unannealed, 6.35 mm)	316	°C	ASTM D648	
Continuous Use Temperature	260	°C		
Melting Temperature	334	°C		
CLTE - Flow	2.2E-5	cm/cm/°C	ASTM D696	
Thermal Conductivity	0.43	W/m/K	ASTM C177	
Electrical	Nominal Value	Unit	Test Method	
Surface Resistivity	1.0E+16	ohms	ASTM D257	
Volume Resistivity (23°C)	1.0E+16	ohms·cm	ASTM D257	
Dielectric Strength	6.9	kV/mm	ASTM D149	
Flammability	Nominal Value	Unit	Test Method	
Flame Rating	V-0		UL 94	
Additional Information				
Data obtained from extruded shapes material				
NOTE				
1.	@ 68°F, 1200 in/min, 155 lbs Load			

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