TECATRON™ GF40

Polyphenylene Sulfide

Ensinger Inc.

Message:

TECATRON™ PPS is a high performance thermoplastic that combines good mechanical properties with excellent thermal and chemical resistance properties. There is no known solvent that dissolves TECATRON™ PPS at temperatures below 392°F. Its low ionic impurities make it an excellent choice for applications where high purity is a concern. TECATRON™ GF40 is a glass reinforced material that offers extremely high strength along with excellent chemical resistance properties. TECATRON™ PVX is a bearing grade PPS that is suitable for high load applications.
TECATRON™ PPS's excellent thermal and chemical resistance along with its ionic impurities make an excellent choice for applications requiring low outgassing and high purity. TECATRON™PPS is typically used in the automotive, electrical/ electronic, industrial, mechanical, appliance and semiconductor industries.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 40% filler by weight		
Features	Low (to None) Ion Content		
	Good dimensional stability		
	High purity		
	High strength		
	Insulation		
	Good corrosion resistance		
	Good creep resistance		
	Good chemical resistance		
Uses	Electrical/Electronic Applications		
	Electrical appliances		
	Industrial application		
	Application in Automobile Field		
Forms	Shapes		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.64	g/cm³	ASTM D792
Water Absorption (23°C, 24 hr)	0.020	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	14000	MPa	ASTM D638
Tensile Strength (Break, 23°C)	185	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	1.9	%	ASTM D638
Flexural Modulus (23°C)	13000	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	260	°C	ASTM D648
Melting Temperature	282	°C	ASTM D2133
CLTE - Flow	1.8E-5	cm/cm/°C	ASTM D696

Specific Heat	1180	J/kg/°C	
Thermal Conductivity	0.25	W/m/K	
Maximum Service Temperature			
Intermittent	260	°C	
Long Term	230	°C	UL 746B
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	ohms	ASTM D257
Volume Resistivity	1.0E+13	ohms·cm	ASTM D257
Dielectric Strength	20	kV/mm	ASTM D149
Dielectric Constant [1] (23°C, 1 MHz)	4.00		ASTM D150
Dissipation Factor			ASTM D150
23°C, 60 Hz	1.0E-4		ASTM D150
23°C, 1 MHz	4.0E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-0		UL 94
Additional Information			
Data obtained from extruded shapes material.			
NOTE			
1.	50% RH		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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