TECATRON™ PPS

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			
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	1.35	g/cm³	ASTM D792
Water Absorption (23°C, 24 hr)	0.020	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale, 23°C)	104		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3310	MPa	ASTM D638
Tensile Strength (Yield, 23°C)	60.0	MPa	ASTM D638
Tensile Elongation (Break, 23°C)	4.0	%	ASTM D638
Flexural Modulus (23°C)	3000	MPa	ASTM D790
Flexural Strength (23°C)	120	MPa	ASTM D790
Coefficient of Friction [1] (vs. Itself - Dynamic)	0.24		ASTM D1894
Wear Factor (0.28 MPa, 0.25 m/sec)	1100	10^-8 mm³/N·m	ASTM D3702

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	27	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	204	°C	ASTM D648
1.8 MPa, not annealed	104	°C	ASTM D648
Melting Temperature	282	°C	ASTM D2133
CLTE - Flow	7.2E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.30	W/m/K	
Maximum operating temperature-Long Term	170	°C	UL 746B
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Constant [2] (23°C, 60 Hz)	3.00		ASTM D150
Dissipation Factor (23°C, 60 Hz)	1.0E-4		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-0		UL 94
Additional Information			
Data obtained from extruded shapes material.			
NOTE			
1.	40 psi, 50 fpm		
2.	50% RH		

Recommended distributors for this material

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