

TECATRON® PVX bearing grade PPS

Compare TECATRON PVX

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.



- **High purity characteristics**
Low ionic impurities are apparent.

- **Outstanding retention of mechanical properties under continuous use up to 338°F (170°C)**

- **Excellent chemical resistance**

- **Good electrical insulator**

- **High mechanical strength**

- **High strength-to-weight ratio**

- **Corrosion resistant**

- **Dimensional stability over wide variations of temperature and moisture**

- **Creep resistance**
Long-term property retention.

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.

	Properties	Condition	Units	Value
	Chemical Designation			PPS
Physical	Filler			Lubricated
	Density		g/cm ₃	1.5
	Tensile Modulus	@ 73 °F	PSI	667,000
	Tensile Strength @ Yld	@ 73 °F	PSI	7,700
	Tensile Strength @ Brk	@ 73 °F	PSI	7,700
	Shear Strength	@ 73 °F	PSI	
	Elongation @ Yld	@ 73 °F	%	
	Elongation @ Brk	@ 73 °F	%	1.5
	Flexural Modulus	@ 73 °F	PSI	696,000
Mechanical	Flexural Strength	@ 73 °F	PSI	13,200
	Compressive Modulus	@ 73 °F	PSI	479,000
	Compressive Strength	@ 73 °F, 10% strain	PSI	
	Izod (charpy) Impact Strength	@ 73 °F	ft-lbs/in	6.7
	Rockwell Hardness	@ 73 °F	M (R) Scale	

	Limiting PV		psi-fpm	
	Vicat Softening Point		°F	
	Melting Temperature		°F	538
	Heat Deflection Temperature	@ 66	°F	
	Heat Deflection Temperature	@ 264	°F	
Thermal	Service Temperature	Intermittent	°F	500
	Service Temperature	Long Term	°F	446
	Thermal Expansion (CLTE)		in/in/°F	2.8*10-5
	Specific Heat		BTU/lb-°F	0.215
	Thermal Conductivity		BTU-in/hr-ft_-°F	4.03
	Surface Resistivity		ohms/square	104-1010
	Volume Resistivity		ohm-cm	107-1012
Electrical	Dielectric Strength		V/mil	
	Dielectric Contant	@ 60 HZ, 73 °F, 50% RH		
	Dissipation Factor	@ 60 Hz, 73 °F		
	Moisture Absorption	@ 24 hrs, 73 °F	%	0.02
	Moisture absorption	@ Saturation, 73 °F	%	
Other	Flammability	UL 94		V-0
	Food Grade			N
	Relative Cost			\$\$\$\$\$

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