Tecatron® PPS
(Polyphenylene Sulfide)

Tecatron® 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 at temperatures below 392°F. Its low ionic impurities make it an excellent choice for applications where high purity is a concern.

• 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®'s excellent thermal and chemical resistance along with its ionic impurities make an excellent choice for applications requiring low outgassing and high purity. Tecatron® is typically used in the automotive, electrical/electronic, industrial, mechanical, appliance and semiconductor industries.

Primary Specification (Resin) (Typical)
ASTM-D-6358 PPS000B33050

Property	ASTM Test Method	Units	**Tecatron®**
Physical			
Density	D792	lbs/in^3	0.0488
Specific Gravity	D792	g/cc	1.35
Water Absorption, @24 hours, 73°F	D570	%	.02
Mechanical			
Tensile Strength @ Yield, 73°F	D638	psi	8,700
Tensile Modulus	D639	psi	480,000
Elongation @ Break, 73°F	D638	%	4
Flexural Strength, 73°F	D790	psi	17,400
Flexural Modulus, 73°F	D790	psi	435,000
Izod Impact Strength, 73°F	D256	ft-lbs/in	0.5
Rockwell Hardness, 73°F	D785	M Scale	M 104
Wear Factor Against Steel, 40 psi, 50 fpm	D3702	In^3/hr x 1/PV	540 X 10^-10
Dynamic Coefficient of Friction, 40 psi, 50 fpm	D3702	-	0.24
Thermal			
Heat Deflection Temperature @ 66 psi @264 psi	D648 D648	°F °F	400 220
Coefficient of Linear Thermal Expansion	D696	in/in/°F	4.0 X 10^-5
Maximum Servicing Temperature, Intermittent Long Term	- UL746B	°F °F	-s 338
Thermal Conductivity	-	-	2.08
Melting Point	D2133	°F	540
Flammability	UL94		V-O
Electrical			
Volume Resistivity	D257	ohm-cm	1.0 X 10^15
Dielectric Constant, @ 60 Hz, 73°F, 50% RH	D150	-	3.0
Dissipation Factor, @ 60 HZ, 73°F	D150	-	.0001

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.