

## Techtron® PPS

PPS products offer the broadest resistance to chemicals of any advanced engineering plastic. They have no known solvents below 392°F (200°C) and offer inertness to steam, strong bases, fuels and acids. A very low coefficient of linear thermal expansion, combined with Quadrant EPP's proprietary stress relieving processes, make these PPS products ideally suited for precise tolerance machined components. In addition, PPS products exhibit excellent electrical characteristics and are inherently flame retardant.

Property	Method	Unit	Value
<b>Mechanical</b>			
Specific Gravity, 73°F	D792		1.35
Tensile Strength, 73°F	D638	psi	13,500
Tensile Modulus of Elasticity, 73°F	D638	psi	500,000
Elongation, 73°F	D638	%	15.0
Flexural Strength, 73°F	D790	psi	21,000
Flexural Modulus, 73°F	D790	psi	575,000
Shear Strength, 73°F	D732	psi	9,000
Compressive Strength, 10% Def., 73°F	D695	psi	21,500
Compressive Modulus of Elasticity, 73°F	D695	psi	430,000
Hardness, Rockwell, Scale as noted, 73°F	D785		M95 (R125)
Hardness, Durometer, Shore D scale, 73°F	D2240		D85
Izod Impact (notched), 73°F	D256 Type A	ft-lb/in	0.6
Coefficient of Friction (Dry vs Steel) Dynamic	PTM55007		0.40
Limiting PV, 73°F	PTM55007	psi-fpm	3,000
k (wear) factor	PTM55010		2,400
<b>Thermal</b>			
Coefficient of linear Thermal Expansion	E-831(TMA)	in/in/°F	2.80 x 10 <sup>-5</sup>
Deflection Temperature 264 psi	D648	°F	250
Melting Point (crystalline) peak	D3418	°F	540
Continuous Service Temperature in Air (Max.)		°F	425
Thermal Conductivity		BTU-in/(hr-ft <sup>2</sup> °F)	2.00

**For additional information about our products call 1-800-366-0300 or via e-mail at [select.support@qplas.com](mailto:select.support@qplas.com)**

All statements, technical information and recommendations contained in this publication are presented good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant EPP cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of Quadrant EPP's products in any given application. Fluorosint, Nylatron, Ertalyte, Acetron, MC and Techtron are all registered trademarks of Quadrant EPP. Delrin and Teflon are registered trademarks of E. I. DuPont, Torlon - Solvay Advanced Polymers, Ultem-GE Plastics.

# Product Data Sheet



## Techtron® PPS

Property	Method	Unit	Value
<b>Electrical</b>			
Dielectric Strength, Short Term	D149(2)	Volts/mil	540
Surface Resistivity	EOS/ESD S11.11	Ohm/square	>10 <sup>13</sup>
Dielectric Constant, 10 <sup>6</sup> Hz	D150(2)		3.00
Dissipation Factor, 10 <sup>6</sup> Hz	D150(2)		0.001
<b>Chemical</b>			
Acids, Weak, 73°F/23°C, acetic acid, dilute hydrochloric or sulfuric			Acceptable Service
Acids, Strong, 73°F/23°C, conc. hydrochloric or sulfuric			Limited Service
Alkalies, Weak, 73°F/23°C, dilute ammonia or sodium hydroxide			Acceptable Service
Alkalies, Strong, 73°F/23°C, conc. ammonia or sodium hydroxide			Acceptable Service
Hydrocarbons-Aromatic, 73°F/23°C, benzene, toluene			Acceptable Service
Hydrocarbons-Aliphatic, 73°F/23°C, gasoline, hexane, grease			Acceptable Service
Ketones, Esters, 73°F/23°C, acetone, methyl ethyl ketone			Acceptable Service
Ethers, 73°F/23°C, diethyl ether, tetrahydrofuran			Acceptable Service
Chlorinated Solvents, 73°F/23°C, methylene chloride, chloroform			Acceptable Service
Alcohols, 73°F/23°C, methanol, ethanol, anti-freeze			Acceptable Service
Inorganic Salt Solutions, 73°F/23°C, sodium chloride, potassium cyanate			Acceptable Service
Continuous Sunlight, 73°F/23°C			Limited Service
<b>Miscellaneous</b>			
Water Absorption Immersion, 24 hr	D570	%	0.01
Water Absorption Immersion, Sat.	D570	%	0.03
Ionic Impurities - Na (Sodium)	Total Digestion	ppm	460.00
Ionic Impurities - K (Potassium)	Total Digestion	ppm	0.30
Ionic Impurities - Fe (Iron)	Total Digestion	ppm	0.30
Outgassing TML (Total Mass Loss)	E595	%	0.00
CVCM (Collected Volatile Condensable Material)	E595	%	0.00
WVR(Water Vapor Regained)	E595	%	0.00
<b>Compliance</b>			
UL94			V-0

**For additional information about our products call 1-800-366-0300 or via e-mail at [select.support@qplas.com](mailto:select.support@qplas.com)**

All statements, technical information and recommendations contained in this publication are presented good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant EPP cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of Quadrant EPP's products in any given application. Fluorosint, Nylatron, Ertalyte, Acetron, MC and Techtron are all registered trademarks of Quadrant EPP. Delrin and Teflon are registered trademarks of E. I. DuPont, Torlon - Solvay Advanced Polymers, Ultem-GE Plastics.