

Ertalyte® PET-P

Ertalyte PET-P is an unreinforced, semi-crystalline thermoplastic polyester based on polyethylene terephthalate (PET-P). It offers the wear resistance of nylon with the dimensional stability of acetal. It is good for both wet and dry environments. The high strength and rigidity of Ertalyte makes it ideal for close tolerance parts. In addition, Ertalyte offers good chemical and abrasion resistance. It is FDA compliant in both natural and black stock shapes. Natural Ertalyte is also USDA, 3A-Dairy and Canada AG compliant. Ertalyte is an excellent candidate for parts used in the food processing and equipment industries.

Property	Method	Unit	Value
Mechanical			
Specific Gravity, 73°F	D792		1.41
Tensile Strength, 73°F	D638	psi	12,400
Tensile Modulus of Elasticity, 73°F	D638	psi	460,000
Elongation, 73°F	D638	%	20.0
Flexural Strength, 73°F	D790	psi	18,000
Flexural Modulus, 73°F	D790	psi	490,000
Shear Strength, 73°F	D732	psi	8,000
Compressive Strength, 10% Def., 73°F	D695	psi	15,000
Compressive Modulus of Elasticity, 73°F	D695	psi	420,000
Hardness, Rockwell, Scale as noted, 73°F	D785		M93 (M125)
Hardness, Durometer, Shore D scale, 73°F	D2240		D87
Izod Impact (notched), 73°F	D256 Type A	ft-lb/in	0.5
Coefficient of Friction (Dry vs Steel) Dynamic	PTM55007		0.20
Limiting PV, 73°F	PTM55007	psi-fpm	2,800
k (wear) factor	PTM55010		60
Thermal			
Coefficient of linear Thermal Expansion	E-831(TMA)	in/in/°F	3.30 x 10 ⁻⁵
Deflection Temperature 264 psi	D648	°F	240
Melting Point (crystalline) peak	D3418	°F	491
Continuous Service Temperature in Air (Max.)		°F	210
Thermal Conductivity		BTU-in/(hr-ft ² °F)	2.00

For additional information about our products call 1-800-366-0300 or via e-mail at 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



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Property	Method	Unit	Value
Electrical			
Dielectric Strength, Short Term	D149(2)	Volts/mil	385
Surface Resistivity	EOS/ESD S11.11	Ohm/square	>10 ¹³
Chemical			
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			Unacceptable
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			Unacceptable
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
Miscellaneous			
Water Absorption Immersion, 24 hr	D570	%	0.07
Water Absorption Immersion, Sat.	D570	%	0.90
Ionic Impurities - Na (Sodium)	Total Digestion	ppm	0.50
Ionic Impurities - K (Potassium)	Total Digestion	ppm	0.10
Outgassing TML (Total Mass Loss)	E595	%	0.10
CVCM (Collected Volatile Condensable Material)	E595	%	0.00
Compliance			
UL94			HB
FDA			Yes
USDA			Yes
3A-Dairy			Yes
Canada AG			Yes

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