



Typical Properties of

**Bearing Grade PET-P (Ertalyte® TX)**

Polyethylene Terephthalate with PTFE Filler

Process: Extruded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.44
Tensile Strength	D638	psi	10,500
Tensile Modulus	D638	psi	500,000
Elongation	D638	%	5
Flexural Strength	D790	psi	14,000
Flexural Modulus	D790	psi	360,000
Compressive Strength	D695	psi	15,250
Compressive Modulus	D695	psi	400,000
Hardness, Rockwell	D785	--	M94
Hardness Durometer	--	--	D80
Izod Impact (notched)	D256	ft. lb of notch	0.4
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.19
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	$4.5 \times 10^{-5}$
Continuous Use Temperature	--	°F	210
Heat Deflection Temperature	D648	°F	180
Glass Transition Temperature	D3418	°F	180
Melting Point	D3418	°F	491
Thermal Conductivity	E1530-11	BTU in/hr ft <sup>2</sup> °F	1.9
Dielectric Strength	D149	Volts/mil	533
Surface Resistivity	EOS/ESD 511.11	ohm/square	$>10^{13}$
Flammability	UL94	--	HB
Water Absorption, 24 hrs.	D570	% by weight	0.06
Water Absorption, Saturation	D570	% by weight	0.47
Limiting PV (4:1 Safety Factor)	--	--	6,000
K-Factor	--	--	35
FDA Compliance	--	--	Yes

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.  
All values at 73 F unless otherwise stated.