



**MECHETEC<sup>®</sup>**  
**PET**



Superior Wear Resistance



Easily Machined and Fabricated

**Polyester Terephthalate (PET)**

## APPLICATIONS

Valves  
Pistons  
Timing Screws  
Scraper Blades  
Food Product Forming Dies

## KEY FEATURES

230 °F Continuous Use Temperature  
Superior Chemical Resistance  
Very Low Moisture Absorption  
FDA and USDA Compliant  
3-A Dairy Compliant

## SHAPES AND SIZES

**ROD DIAMETER**  
PET 0.375" - 6.0"

**SHEET THICKNESS**  
PET 0.25" - 4.0"



**MECHETEC®**

PET

	Test Method	Units	PET
<b>Mechanical</b>			
Specific Gravity	ASTM-D792	---	1.34
Tensile Strength	ASTM-D638	psi	12,200
Tensile Elongation	ASTM-D638	%	25
Tensile Modulus of Elasticity	ASTM-D638	psi	470,000
Flexural Strength	ASTM-D790	psi	17,500
Flexural Modulus of Elasticity	ASTM-D790	psi	490,000
Izod Notched Impact	ASTM-D256	ft.-lb./in.	0.6
Rockwell Hardness	ASTM-D785	R scale	R125
<b>Thermal</b>			
Coef. of Linear Thermal Expansion	ASTM-D696	in./in./deg F	3.6 x 10 <sup>-5</sup>
Max. Continuous Use Temp.	Internal Std.	°F	230
Heat Deflection Temp. @ 264 psi	ASTM-D648	°F	190
Melting Point	ASTM-D3418	°F	491
<b>Electrical</b>			
Dielectric Strength-Short Term	ASTM-D149	volts/mil	450
Dielectric Constant @ 60 Hz	ASTM-D150	---	3.4
Dissipation Factor @ 60 Hz	ASTM-D150	---	0.002
Volume Resistivity	ASTM-D257	ohm-cm	>10 <sup>14</sup>
<b>Miscellaneous</b>			
Water Absorption/24 hrs.	ASTM-D570	% weight	0.1
Water Absorption @ Saturation	ASTM-D570	% weight	0.9
Flammability	UL-94	---	HB
<b>Agency Compliance</b>			
FDA	---	---	Yes
USDA	---	---	Yes
3-A Dairy Standards	---	---	Yes

MECHETEC® is a registered trademark of Polymer Industries

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