



## PEEK Film (polyetheretherketone)

PEEK is a high performance semi-crystalline thermoplastic. PEEK's characteristics include high temperature performance, excellent wear properties, superior chemical resistance, hydrolytic stability and outstanding toughness and strength. PEEK meets many aerospace, automotive, fire, smoke and toxicity, food/water, and military approvals and standards. The following physical property information is based on typical values of the base PEEK resin as well as test results obtained from actual film testing.

### Applications Include:

- Automotive gaskets
- Aircraft interiors
- Helicopter rotor blades (leading edge)
- Transformer slot liners
- Copy machine components
- Thrust washers
- Hot melt adhesives
- Reed fuel valves
- Disk polishing carriers

### Advantages of PEEK Film:

- Extremely high temperature resistance and continuous use temperature
- Excellent flexural and tensile properties
- Good abrasion and rain erosion resistance
- Excellent chemical resistance
- Excellent electrical properties
- Hydrolytically stable

### Manufacturing Capabilities:

**Thicknesses and Widths:**  
 .001" to .010" up to 27" wide  
 .011" to .029" up to 26" wide

### Finishes:

all thicknesses available  
 polished one side,  
 matte the other (P/M)

\*In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

	Units	ASTM Test	Result
<b>Mechanical</b>			
Tensile Strength @yield	psi	D882	17,400
Elongation @break	%	D882	50
Tensile Modulus	psi	D882	391,500
Flexural Modulus	psi	D790	531,000
Tear Strength - prop.	g/mil	D1004	35
<b>Thermal</b>			
Continuous Use Temp.–UL	°F	—	464
Heat Deflection Temperature @264 psi	°F	D648	330
Melt Temp.–DSC	°F	—	644
Glass Transition Temp.	°F	D3418	289
<b>Flammability</b>			
UL Rating–UL94	—	—	VTM-1
L.O.I.	%	D2863	23
NBS Smoke	Dmax	E662	1
<b>Electrical</b>			
Surface Resistivity	Ohms	D257	1.8 x 10 <sup>15</sup>
Dielectric Strength @.003"	V/mil	D149	3,200
Dielectric Constant	1 KHz	D150	3.30
Dissipation Factor	10 KHz	D150	0.0026
<b>Other</b>			
Specific Gravity	—	D792	1.256
Water Absorption	%/24 hr.	D570	0.4
Refractive Index	—	—	—
Haze	%	D1003	0.5
Area Factor	in <sup>2</sup> /lb/mil	—	20,900