# **ETHERMALUX®** PES

Thermalux® is a Registered Trademark of Westlake Plastics Co.

High resistance to heat and combustibility, low smoke emission, and transparency are the combination of properties possessed by stock shapes extruded from PES. These, coupled with light weight, good impact resistance, dimensional stability, and chemical resistance. Make stock shapes extruded from PES resin useful in the electrical/electronics, aerospace/aircraft, automotive, and mass transit industries. PES stock shapes are a so applicable for heat and fire safety, food service, and hospital and health care items.











### The following physical property information s based on typical values of the base polyethersulfone resin

Mechanical			
Tensile Strength @yield	psi	D638	10,2000
Tensile Strength @break	psi	D638	-
Tensile Modulus	psi	D638	360,000
Tensile Elongation @yield	%	D638	5.0-6.0
Tensile Elongation @break	%	D638	50.0-6.0
Flexural Strength @yield	psi	D790	15,400
Flexural Modulus	psi	D790	390,000
Compressive Strength @yield	psi	D695	13,900
Compressive Modulus	psi	D695	-
Izod Impact Strength			
Un-Notched	ft•lbs/in	D256	No Break
Notched @73°F	ft•lbs/in	D256	1.3
Hardness (R, M, L or D)	-	D785	R120
		D2240	M69
Thermal			
Heat Deflection Temperature			
@66 psi	°F	D648	358
@264 psi	°F	D648	345
Coefficient of Thermal Expansion	in/in/°F	D696	3.1x10⁻⁵
Flammability Rating-UL94 @.176"	-	-	V-0
Thermal Conductivity	(BTU•in)/(hr•ft²•°F)	C177	1.80
Limiting Oxygen Index	%	D2863	30.0
Electrical			
Dielectric Strength	V/mil	D149	425
Dielectric Constant @1kHz	-	D150	3.06
Dissipation Factor @1kHz	-	D150	0.0010
Volume Resistivity	ohm•cm	D257	5.0x10 <sup>16</sup>
Optical			
Haze	%	D1746	5.0
Transparency	%	D1746	75
Other			
Specific Gravity	-	D792	1.24



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# **Applications Include:**

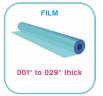
- Printed circuits
- High Intensity light bases
- Safety face shields
- Machine guards
- Connectors

#### **Manufacturing Capabilities:**









## **Colors:**

WEBSITE

**NATURAL** 

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

#### Also Available at Westlake:





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