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Thermalux® PESU



Thermalux® Polyethersulfone (PESU) is made from resin that is suitable for use in certain food contact applications, contact your local Westlake Plastics representative for specific regulatory declarations. Thermalux is an amber colored, semi-transparent, high performance engineering thermoplastic. Thermalux® PESU combines good chemical resistance with a high heat deflection temperature (204°C / 399°F), making it an excellent choice for food service applications. This resin is also inherently flame retardant making it suitable for use in electronic components.

INDUSTRY



Chemical Process







Engineering

COLORS AVAILABLE



Natural

ATTRIBUTES

 Heat Resistant	✓
 Chemical Resistance	✓
 Dielectric Properties	✓
 Food Contact	✓

SHAPES

Extruded Slab	✓
Extruded Sheet	✓
Extruded Film	✓
Extruded Rod	✓



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TYPICAL PROPERTIES

PROPERTY	TEST STANDARD	ENGLISH UNITS	METRIC UNITS
Mechanical			
Tensile Strength @ Yield	D638	13.2 kpsi	91 Mpa
Tensile Elongation @ Yield	D638	6.9%	6.9%
Tensile Elongation @ Break	D638	>50%	>50%
Tensile Modulus	D638	377 kpsi	2600 Mpa
Flexural Strength	D790	18 kpsi	124 Mpa
Flexural Modulus	D790	392 kpsi	2700 Mpa
Izod Impact Resistance - Notched	D256	1.3 ft-lb/in	0.07 kJ/m
Thermal			
HDT @ 264 psi	D648	392°F	200°C
Physical			
Moisture Absorption	D570	0.56%	0.56%
Specific Gravity	D792	1.37	1.37

*Data above is based on testing of injection molded test specimens



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PRODUCT SHAPES & DIMENSIONS

Rods: 48"L (122cm)

2.25" (57.15mm)	2.5" (63.5mm)	2.75" (69.85mm)	3" (76.2mm)	3.25" (82.55mm)	3.5" (88.9mm)
3.75" (95.25mm)	4" (101.6mm)				

Rods: 96"L (244cm)

0.5" (12.7mm)	0.75" (19.05mm)	1" (25.4mm)	1.25" (31.75mm)	1.5" (38.1mm)	1.75" (44.45mm)
2" (50.8mm)					

Extruded Slabs: 24"W (61cm)

0.5" (12.7mm)	0.75" (19.05mm)	1" (25.4mm)	1.25" (31.75mm)	1.5" (38.1mm)	1.75" (44.45mm)
2" (50.8mm)	2.25" (57.15mm)	2.5" (63.5mm)	2.75" (69.85mm)	3" (76.2mm)	3.25" (82.55mm)
3.5" (88.9mm)					

Extruded Sheets: 48"W x 96"L (122cm x 244cm)

0.03" (0.76mm)	0.035" (0.89mm)	0.06" (1.52mm)	0.062" (1.57mm)	0.08" (2.03mm)	0.09" (2.29mm)
0.095" (2.41mm)	0.125" (3.18mm)	0.1875" (4.76mm)	0.25" (6.35mm)		

Extruded Films: 26"W (66cm)

0.002" (0.05mm)	0.003" (0.08mm)	0.004" (0.1mm)	0.005" (0.13mm)	0.01" (0.25mm)	0.02" (0.51mm)
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LAST REVISED: 01/30/2025

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