

Westlake Plastics Tempalux® Polyetherimide

Category : Polymer , Thermoplastic , Polyetherimide (PEI)

Material Notes:

An amorphous thermoplastic polyetherimide, stock shapes from ULTEM® resin possess a combination of useful characteristics, including high strength at elevated temperatures, high modulus, and broad chemical resistance. Tempalux stock shapes are inherently flame resistant with low smoke emission. Tempalux stock shapes display property retention and resistance to environmental stress cracking when exposed to a wide variety of chemicals. The standard color of Tempalux stock shapes is light amber. Glass filled grades appear tan or greenish in color. Information provided by Westlake Plastics.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Westlake-Plastics-Tempalux-Polyetherimide.php

Physical Properties	Metric	English	Comments
Density	1.27 g/cc	0.0459 lb/in ³	ASTM D792
Water Absorption	0.25 %	0.25 %	ASTM D570; 24 hrs.

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	109	109	ASTM D7852
Tensile Strength, Yield	105 MPa	15200 psi	ASTM D638
Elongation at Break	60 %	60 %	ASTM D638
Elongation at Yield	7.0 %	7.0 %	ASTM D638
Tensile Modulus	2.96 GPa	430 ksi	ASTM D638
Flexural Yield Strength	152 MPa	22000 psi	ASTM D790
Flexural Modulus	3.31 GPa	480 ksi	ASTM D790
Compressive Yield Strength	151 MPa	21900 psi	ASTM D695
Compressive Modulus	3.31 GPa	480 ksi	ASTM D695
Izod Impact, Notched	0.534 J/cm	1.00 ft-lb/in	ASTM D256
Izod Impact, Unnotched	13.3 J/cm	25.0 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	55.8 µm/m-°C	31.0 µin/in-°F	ASTM D696
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Thermal Conductivity	0.220 W/m-K	1.53 BTU-in/hr-ft ² -°F	ASTM C177

Thermal Properties Deflection Temperature at 0.46 MPa (0.07 psi)	Metric 210 °C	English 410 °F	Comments ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	200 °C	392 °F	ASTM D648
Flammability, UL94	5VA @Thickness 1.91 mm	5VA @Thickness 0.0750 in	
Oxygen Index	47 %	47 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+17 ohm-cm	1.00e+17 ohm-cm	ASTM D257
Dielectric Constant	3.15 @Frequency 1000 Hz	3.15 @Frequency 1000 Hz	ASTM D150
Dielectric Strength	32.7 kV/mm	831 kV/in	ASTM D149
Dissipation Factor	0.0013 @Frequency 1000 Hz	0.0013 @Frequency 1000 Hz	ASTM D150

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China