TEMPALUX® WM

Tempalux® is a Registered Trademark of Westlake Plastics Co.

Tempalux WM is Westlake Plastics' medical grade of polyetherimide (PEI). This transparent amber-colored amorphous thermoplastic exhibits excellent resistance to a wide range of chemicals and offers outstanding strength and stiffness over a broad temperature range maintaining performance up to 180C for extended periods of time. The material is FDA, USP VI and ISO-10993 compliant. Its regulatory compliance profile and lot traceability make it ideal for use in medical and life science applications. Sterilization methods include EtO gas, radiation, steam autoclaving, dry heat and cold sterilization.









The following physical property information is based on typical values of the base polyetherimide resin.

@break psi ASTM D638 1 Tensile Modulus psi ASTM D638 55 Tensile Elongation @yield % ASTM D638 Tensile Elongation @break % ASTM D638 Flexural Strength @yield psi ASTM D790 2 Flexural Modulus psi ASTM D790 5 Izod Impact Strength Un-Notched ft-lbs/in ASTM D4812 Notched @73°F ft-lbs/in ASTM D256		
@yield psi ASTM D638 1 @break psi ASTM D638 1 Tensile Modulus psi ASTM D638 5 Tensile Elongation @yield % ASTM D638 Tensile Elongation @break % ASTM D638 Flexural Strength @yield psi ASTM D790 2 Flexural Modulus psi ASTM D790 5 Izod Impact Strength Un-Notched ft-lbs/in ASTM D4812 Notched @73°F ft-lbs/in ASTM D256 Hardness M Scale ASTM D785 Id		
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Flexural Strength @yield psi ASTM D790 2 Flexural Modulus psi ASTM D790 5 Izod Impact Strength Un-Notched ft-lbs/in ASTM D4812 Notched @73°F ft-lbs/in ASTM D256 Hardness M Scale ASTM D785 Id	7.0 -	
Flexural Modulus psi ASTM D790 5	60.0 4	1.0 3.0
Izod Impact Strength	4,000 30,000	@break 30,000 @break
Un-Notched ft-lbs/in ASTM D4812 Notched @73°F ft-lbs/in ASTM D256 Hardness M Scale ASTM D785	10,000 1,000	0,000 1,300,000
		0.0 8.0 1.2 1.6
Thermal	M109 M1	114 M114
Heat Deflection Temperature °F ASTM D648 @66 psi °F ASTM D648 @264 psi °F ASTM D648		10 414 10 410
Coefficient of Thermal Expansion in/in/°F ASTM E831 3.	.1x10 ⁻⁵ 1.4x	x10 ⁻⁵ 1.1x10 ⁻⁵
	IO JVA	016" @.010" /-0 V-0
Limiting Oxygen Index % ASTM D2863	47.0 50	0.0 50.0
Electrical		
Dielectric Strength .063" in oil V/mil ASTM D149	710 6	70 770
Dielectric Constant @1kHz — ASTM D150	3.15 3.	.50 3.70
Dissipation Factor @1kHz — ASTM D150 0	0.0012 0.0	0.0015
Volume Resistivity ohm•cm ASTM D257 1.	0x10 ¹⁷ 7.0x	x10 ¹⁶ 3.0x10 ¹⁶
Other		
Specific Gravity — ASTM D792	1.27 1.	.42 1.51
Water Absorption @24 hours % ASTM D570		

Applications Include:

- -Burn-in test sockets
- Connectors
- Automotive components
- Valves, electrical fittings

Manufacturing Capabilities:





Colors:

Amber - unfilled

Tan/Green - glass filled

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

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