



Material Data Sheet

Product: Polyetherimide	Base Material: Film
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Description

Polyetherimide (PEI) is suitable for applications at high temperature. This amorphous polymer shows a combination of outstanding thermal, mechanical, and electrical properties, together with very low flammability. (PEI) resists a wide range of chemicals, has good resistance to UV and gamma radiation, and its high glass transition temperature allows the use at high temperatures while keeping the high mechanical properties.

Typical Properties

<u>Physical and Thermal Properties</u>	Test method	Typical values			
		SI Units		Customary Units	
Yield	Internal	803 m ² /kg/μm		22,222 in ² /lb/mil	
Glass Transition Temperature	ASTM D-3418	217 °C		423 °F	
Thermal Conductivity	ASTM C-177	0.122 W/(m•K)		0.73 BTU•in/(h•ft ² • °F)	
<u>Mechanical Properties</u>	Test Method	MD	TD	MD	TD
Stress at Yield @ 23°C (73°F)	ASTM D-882	103 MPa	107 MPa	15,000 psi	15,600 psi
Elongation at Yield @ 23°C (73°F)	ASTM D-882	7%	7%	7%	7%
Stress at Break @ 23°C (73°F)	ASTM D-882	114 MPa	128 MPa	16,600 psi	18,500 psi
Elongation at Break @ 23°C (73°F)	ASTM D-882	99%	137%	99%	137%
Modulus @ 23°C (73°F)	ASTM D-882	2,850 MPa	2,690 MPa	415 kpsi	390 kpsi
Tear Propagation	ASTM D-1922	10 g force	10 g force	0.022 lbf	0.022 lbf
Tear Resistance	ASTM D-1004	1200 g force	1150 g force	2.66 lbf	2.55 lbf
<u>Electrical Properties</u>	Test Method				
Dielectric Strength	ASTM D-149	33 V/μm		830 V/mil	
Dielectric Constant @ 1 kHz	ASTM D-150	3.15		3.15	
Dissipation Factor @ 1 kHz	ASTM D-150	1•10 ⁻³		1•10 ⁻³	

The information presented in this publication is believed to be accurate and is not intended to constitute a specification. The values given reflect average material characteristics and may vary slightly between base suppliers. Users should evaluate the material to determine the suitability for their own particular application.

Base on terms and conditions
 Seller's only obligation shall be to replace such quantity of the product proven to be defective. Seller shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use, or inability to use the product for his/her use, and the user assumes all risk and liability whatsoever in connection therewith. The foregoing may not be changed, except by an agreement signed by an officer or seller. We hereby certify that goods covered by this quotation have been produced in compliance with the Fair Labor Standards Act of 1983, as amended. Any credit memos to purchaser shall expire if not used within one year from date of credit memo.