



Material Data Sheet

Product: Polyetheretherketone	Base Material: Film
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Description

Polyetheretherketone (PEEK) is a high-performance amorphous or semi-crystalline thermoplastic film with unique properties. PEEK films have high temperature resistance, excellent chemical and fatigue resistance and very high thermal stability. PEEK films exhibit superior mechanical and electrical properties at elevated temperatures in critical environments. PEEK film carries a VTM-0 class flammability rating (27 μ) and exhibits a very low smoke and toxic gas emission when exposed to flame.

Typical Properties

<u>Physical and Thermal Properties</u>	Test method	Typical values			
		SI Units		Customary Units	
Glass Transition Temperature	ASTM D-3418	143 °C		289 °F	
Water Absorption @ 55°C (122°F), 75% RH, 24 hrs.	ASTM D-570	0.5%		0.5%	
Yield	Internal	776 m ² /kg/ μ m		21,500 in ² /lb/mil	
<u>Mechanical Properties</u>	Test Method	MD	TD	MD	TD
Stress at Yield @ 23°C (73°F)	ASTM D-882	76 MPa	72 MPa	11,000 psi	10,500 psi
Elongation at Yield @ 23°C (73°F)	ASTM D-882	6.8%	6.7%	6.8%	6.7%
Stress at Break @ 23°C (73°F)	ASTM D-882	109 MPa	96 MPa	15,800 psi	13,900 psi
Elongation at Break @ 23°C (73°F)	ASTM D-882	145%	170%	145%	170%
Modulus @ 23°C (73°F)	ASTM D-882	2,050 MPa	2,000 MPa	300 kpsi	290 kpsi
Tear Propagation	ASTM D-1922	21 g force	28 g force	0.05 lbf	0.06 lbf
Tear Resistance	ASTM D-1004	884 g force	857 g force	1.95 lbf	1.89 lbf
Dart Impact	ASTM D-1709	385 g		.9	
<u>Electrical Properties</u>	Test Method				
Breakdown Voltage	ASTM D-149	7.5 kV		7.5kV	
Dielectric Strength	ASTM D-149	3,800 V/mil		3,800 V/mil	

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.