

Dexnyl® PEEK-SF Film_22

Technical Datasheet

BIEGLO PEEK-Film is a semi-crystalline thermoplastic film with high crystallinity made of Polyetheretherketone.

Main characteristics:

excellent radiation resistance
excellent chemical and hydrolysis resistance
excellent mechanical properties
high thermostability
opaque
stress crack resistant
FDA Food contact compliant

Physical Properties:

Density	ISO 1183	g/cm ³	1,30
Glass Transition Temperature	ISO 11357	°C	143
Crystalline Melting Point	-	°C	343

Mechanical Properties

Yield Tensile Strength at 23°C	ISO 527	N/mm ²	90
Yield Tensile Elongation at 150°C	ISO 527	N/mm ²	35
Tensile Strength at 23°C	ISO 527	N/mm ²	130
Tensile Strength at 150°C	ISO 527	N/mm ²	80
Tensile Elongation at 23°C	ISO 527	%	170
Tensile Elongation at 150°C	ISO 527	%	300
Tensile Modulus	ISO 527	N/mm ²	3200
Initial Tear Resistance	EN 60674	N	140
Tear Propagation Resistance	ISO 8296	N/mm	240

Electrical Properties

Dielectric Constant at 1kHz/23°C	IEC 250	-	3,3
Dissipation Factor 1kHz 23°C	IEC 250	-	0,0013
Volume Resistivity	IEC 93	Ohm.cm	10 ¹⁷
Surface Resistivity	IEC 93	Ohm	10 ¹⁵
Dielectric Strength	IEC 243	kv/mm	180

Thermal Properties

Long-term service temperature	UL746B	°C	22 0
Flammability	UL94	VTM/μ	0/25
Thermal expansion coefficient x10 ⁶	E831	1/°K	46
Thermal conductivity x10 ²	DIN 52612	W/mK	25

All the tests have been conducted with a standard conditioning atmosphere of 23° C (at the moment no other temperature is available). All the test specimens were made through extrusion process. The specified values are established from average values of several tests and they correspond to our today's knowledge. They are only to be used as information about our products and as help for the material selection. With these values, BIEGLO does not ensure specific properties, or the suitability for certain application, therefore BIEGLO does not assume any legal responsibility for an improper usage. Since the plastics' properties depend on the manufacturing process (extrusion, injection moulding), on the dimensions of the semi-finished material and on the degree of crystallinity, the actual properties of a specific product may slightly deviate from the tested ones. For information about divergent properties do not hesitate to contact us. On request we advise you regarding the most appropriate component design and the definition of material specifications more suitable to your application data. Notwithstanding, the customer bears all the responsibility for the thorough examination of suitability, efficiency, efficacy and safety of the chosen products in pharmaceutical applications, medical devices or other end uses.
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