Ajedium™ Films -- Polyetherimide

Polyether Imide

Solvay Specialty Polymers

Message:

Films of Polyetherimide (PEI) are amorphous and suitable for high termperature applications. Additionally, they have an excellent combination of thermal, mechanical and electrical properties, along with very low flammability and low levels of smoke evolution during combustion. These features make PEI especially well suited for electrical and electronic insulators. Additionally, applications in a variety of structural components requiring high strength and rigidity at elevated temperatures have used PEI films.
Polyetherimide resists a wide range of chemicals and has good resistance to UV and gamma radiation. Its glass transition temperature allows for use at high temperatures while maintaining the high mechanical properties.
Electrical properties show very good stability under variable temperatures, humidity and frequency conditions. Moreover, PEI films exhibit a low dissipation factor even at very low frequencies.

General Information			
Features	Good dimensional stability		
	Low smoke		
	Good electrical performance		
	Good chemical resistance		
	Heat resistance, high		
	Flame retardancy		
Uses	Electrical/Electronic Applications		
	Airplane trim		
	Industrial application		
	Application in Automobile Field		
	Oil/Gas Supplies		
RoHS Compliance	RoHS compliance		
Appearance	Amber		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.27	g/cm³	ASTM D792
Water Absorption (24 hr)	0.20	%	ASTM D570
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	30	µm	
secant modulus			ASTM D882
MD	2850	MPa	ASTM D882
TD	2690	MPa	ASTM D882
Tensile Strength			ASTM D882
MD: Yield	103	MPa	ASTM D882
TD: Yield	107	MPa	ASTM D882
MD: Fracture	114	MPa	ASTM D882
TD: Fracture	128	MPa	ASTM D882

Tensile Elongation			ASTM D882
MD: Yield	7.0	%	ASTM D882
TD: Yield	7.0	%	ASTM D882
MD: Fracture	99	%	ASTM D882
TD: Fracture	140	%	ASTM D882
Dart Drop Impact	< 80	g	ASTM D1709
Area coefficient	152	$ft^2/lb/mil$	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	217	°C	ASTM D3418
Thermal Conductivity	0.12	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+17	ohms·cm	ASTM D257
Dielectric Strength (0.0300 mm)	33	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	3.15		ASTM D150
Dissipation Factor (1 kHz)	1.0E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Oxygen Index	47	%	ASTM D2863
Additional Information			

Standard Thicknesses and Widths
Widths are available from 22" (559 mm) to 56" (1422 mm).
Products with widths 56 inches are available upon request.
Tolerances for widths are +/- 4mm.
For PEI film, the standard thicknesses are 25 microns (1 mil) to 1016 microns (40 mil).
Surface Finishes
Standard surface finish is P/M (polished / matte).
Custom finishes of P/P (polished / polished) and M/M (matte / matte) are available.
Packaging
Film is supplied in a roll form of high quality, cardboard core of 3" (76mm) or 6" (152mm).
PVC cores are available upon request in 3" and 6" sizes.
Labeling
Products are labeled to comply with national and international standards.
Labels include product grade, unique batch number, roll length, roll width, product thickness, and net weight.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China


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