

Flame-retarded polyester base film

DIALAMY[®]

■ Characteristics

1. Coating, laminating, cutting, bending, punching and other operation are about as easy as normal polyester film.
2. Heat resistance, physical and electronic properties, and chemical resistance in the same way as normal polyester film.
3. Various thicknesses. (40 μ m ~ 500 μ m)
4. PBDE and PBB are not used for flame retardant agent.

■ Applications

1. Electrical appliance-parts and components
2. Electrical insulating boards
* 200 μ m ~ 500 μ m : motor,trans, switch selectable power, copy machine
3. Circuit boards
* 100 μ m ~ 200 μ m : substrate for flat heating element
* 70 μ m ~ 130 μ m : membrane switch substrate

■ Specifications

Thickness(μ m)	Roll		Sheets		
	Width(mm)	Length(m)	Size		Pierces
			Width (mm)	Length (mm)	
40	500	100	—	—	—
	1,000	100			
50	500	100	1,000	500	200
	1,000	100			
70	500	100	1,000	500	200
	1,000	100			
100	500	100	1,000	500	100
	1,000	100			
130	500	100	1,000	500	100
	1,000	100			
200	500	100	1,000	500	100
	1,000	100			
270	500	100	1,000	500	100
	1,000	100			
340	500	50	1,000	500	50
400	500	50	1,000	500	50
500	500	50	1,000	500	50

■ Properties

Dialamy (Thickness: 100 μm)

Test Items		Unit	Data	Test Methods		
Physical Properties	Tensile Strength	MD	MPa	140	JIS C 2318	
		TD		167		
	Elongation	MD	%	110		
		TD		100		
	Edge tear resistance	MD	N/20 mm	493		
		TD		622		
	Bending Strength	MD	—	35,000	JIS P 8115	
TD		30,000				
Water Absorption		%	0.9	ASTM D570		
Electrical Properties	Dielectric Breakdown Voltage		kV	13.6	JIS C 2318	
	Dielectric Constant	1KHz	—	2.6		
		1MHz		—		
	Dielectric Dissipation	1KHz	—	3×10^{-2}		
1MHz		—				
Surface Resistance		$\Omega \cdot \text{cm}$	3×10^{15}			
Thermal Properties	Thermal Shrinkage	MD	%	1.4	ASTDM D696	
		TD		-0.2		
	Thermal expansion coefficient		cm/cm/°C	3×10^{-5}		
	Flammability	—	—	VTM-0 適合		UL94
Oxygen figure		—	28	JIS K 7201		
Optical Properties	Light transmission		%	47	JIS K 7105	
	Haze		%	89		
Chemical Properties	Weak acid and Weak base : Good Conc. sulfuric acid and Conc. Hydrochloric acid : Not good Alcohol and hydrocarbon : Good Oil and fat : Good Ketone, Ester, and Chlorinated substances : Good Phenols : Not good					

*The values mentioned above are typical ones, but not guaranteed ones.

■ Important Safeguards

Directions for safe use are prepared for the purpose of maintaining the safety of customers, your clients and property. The products carrying warning and caution notice, please read the following details.



If this product is mishandled in defiance of this sign, you may have a risk of death or serious injury.

- Absolutely do not implant, insert in the body.
- Never use for any applications for which the material will be left in the body.
- In case of using for medical devices, foodstuff, other special purpose applications, please test and make certain that you can do so safely.



If this product is mishandled in defiance of this sign, you may have a risk of serious injury and property damage.

- During forming and carrying, wear proper protective equipment to prevent possible injury to hands and fingers.
- Don't use for foodstuff.
- Avoid inhaling of bromine containing smoke generated by burning Dialamy film with other combustible material.
- Avoid to store the area that are wet, hot or humid, or place of direct sunlight. Store in a cool and dark place.
- Dispose of the scrap as incombustible waste material.