



DuPont Teijin Films™

MELINEX® ST510

Product Description

MELINEX® ST510 is a heat stabilized high clarity polyester film with pretreatment on one side to produce low iridescence when coated with an acrylic hard coat and the other to promote adhesion to many industrial coatings and inks. MELINEX® ST510 exhibits improved performance in multi-pass printing applications employing UV curing and offers greater ease of embossing or die cutting.



Typical Properties

Available Thickness [Gauge]
500; 700; 1000

Property	Thickness	Value	Units	Test
ELECTRICAL				
Dielectric Strength	700	17.5	kV	ASTM D149
Dielectric Strength	1000	19.0	kV	ASTM D149
Surface Resistivity	All	10 ¹³	Ohms/sq	ASTM D257
Volume Resistivity	All	10 ¹⁵	Ohms-m	ASTM D257
OPTICAL				
Haze	500	0.4	%	ASTM D1003
Haze	700	0.6	%	ASTM D1003
Haze	1000	0.8	%	ASTM D1003
PHYSICAL				
C.O.F. (static) A-B	All	0.7		ASTM D1895
Flexural Strength	500	>20,000	cycles	ASTM D2176
Flexural Strength	700	>15,000	cycles	ASTM D2176
Tensile Strength MD (break)	All	25,000	psi	ASTM D882A
Tensile Strength TD (break)	All	25,000	psi	ASTM D882A
Yield (nominal)	500	3,968	sq. in/lb.	
Yield (nominal)	700	2,834	sq. in/lb.	
Yield (nominal)	1000	1,984	sq. in/lb.	
THERMAL				
Coefficient of Hygroscopic Expansion	All	6X10 ⁻⁶	in/in %RH	40% - 80% RH
Coefficient of Thermal Expansion	All	10x10 ⁻⁶	in/in/°F	(68 - 122°F)
Melting Point (PEAK)	All	265	C	
Shrinkage MD (150°C)	All	<0.10	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	All	<0.01	%	Unrestrained @ 150°C/30 min

Contact Info

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Disclaimer

Note: These values are typical performance data for DuPont Teijin Films' polyester film; they are not intended to be used as design data. We believe this information is the best currently available on the subject. It is offered as a possible helpful suggestion in experimentation you may care to undertake along these lines. It is subject to revision as additional knowledge and experience is gained. DuPont Teijin Films makes no guarantee of results and assumes no obligation or liability whatsoever in connection with this information. This publication is not a license to operate under, or intended to suggest infringement of, any existing patents.

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