



## MELINEX® S

### Product Description

Melinex® S is a general purpose film which combines excellent handling characteristics with a slightly hazy appearance. It is available in specific thicknesses from 48 - 500 gauge, and is used for the full range of Melinex® applications.

### Approvals

**UL 94 VTM-2** - for 92 - 500 gauge (0.023 - 0.13mm)

**UL Recognition** - Product has been registered with Underwriters Laboratories

### Typical Properties

Available Thickness [Gauge]
48; 75; 92; 142; 200; 300; 400; 500

Property	Thickness	Value	Units	Test
<b>ELECTRICAL</b>				
Breakdown Voltage	48	4.8	kV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	75	6.1	kV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	92	6.4	kV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	142	8.3	kV	ASTM D149-81 0.25 inch electrodes in dry air@25°C
Breakdown Voltage	200	10	kV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	300	12	kV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	400	14	KV	ASTM D149-81 0.25 inch electrodes in dry air @25°C
Breakdown Voltage	500	16	kV	ASTM D149-81 0.25 inch electrodes in dry air@25°C
Surface Resistivity	All	10 <sup>15</sup>	Ohms/sq	ASTM D257 500 V DC @ 25°C 50% RH
Volume Resistivity	All	10 <sup>17</sup>	Ohm - cm	ASTM D257 100 V DC @ 25°C , and 100 sec
<b>OPTICAL</b>				
Haze	48	3.1	%	ASTM D1003
Haze	75	5.3	%	ASTM D1003
Haze	92	5.6	%	ASTM D1003
Haze	142	7.5	%	ASTM D1003
Haze	200	9.0	%	ASTM D1003
Haze	300	13.8	%	ASTM D1003
Haze	400	15.6	%	ASTM D1003
Haze	500	20.7	%	ASTM D1003
Total Light Transmission (TLT)	48	88.5	%	ASTM D1003
Total Light Transmission (TLT)	75	88.0	%	ASTM D1003
Total Light Transmission (TLT)	92	87.0	%	ASTM D1003
Total Light Transmission (TLT)	142	86.5	%	ASTM D1003
Total Light Transmission (TLT)	200	85.5	%	ASTM D1003
Total Light Transmission (TLT)	300	84.5	%	ASTM D1003
Total Light Transmission (TLT)	400	83.0	%	ASTM D1003
Total Light Transmission (TLT)	500	81.0	%	ASTM D1003
<b>PHYSICAL</b>				
C.O.F. (dynamic) A-B	All	0.4		ASTM D1894
Density	All	1.40	g/cc	
Elongation at Break MD	All	160	%	ASTM D882A
Elongation at Break TD	All	100	%	ASTM D882A

Tensile Strength MD	All	29,000	psi	ASTM D882A
Tensile Strength TD	All	37,000	psi	ASTM D882A
Yield (nominal)	48	42,200	in <sup>2</sup> /lb	
Yield (nominal)	75	26,500	in <sup>2</sup> /lb	
Yield (nominal)	92	21,800	in <sup>2</sup> /lb	
Yield (nominal)	142	14,000	in <sup>2</sup> /lb	
Yield (nominal)	200	9,900	in <sup>2</sup> /lb	
Yield (nominal)	300	6,600	in <sup>2</sup> /lb	
Yield (nominal)	400	5,047	in <sup>2</sup> /lb	
Yield (nominal)	500	4,000	in <sup>2</sup> /lb	
Yield Strength MD	All	14,500	psi	ASTM D882A
Yield Strength TD	All	14,400	psi	ASTM D882A
<b>THERMAL</b>				
Shrinkage MD (190°C)	48 - 92	3.5	%	Unrestrained @ 190°C/5 min
Shrinkage MD (190°C)	142 - 500	2.5	%	Unrestrained @ 190°C/5 min
Shrinkage TD (190°C)	48 - 92	3.5	%	Unrestrained @ 190°C/5 min
Shrinkage TD (190°C)	142 - 500	0.5	%	Unrestrained @ 190°C/5 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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