



MYLAR® EL

Product Description

Mylar® EL films, typically 48 through 500 gauge are strong, tough, general -purpose films for electrical/electronic uses. Heavier gauges of Mylar® EL films are similar to Mylar® MO films. Available in grades from transparent to hazy, Mylar® EL films offer chemical inertness, good dielectrics, high temperature durability, and good handling characteristics.

General Product Info

The superior electrical, mechanical, thermal, and chemical inertness characteristics of Mylar® type EL films make them ideally suited for electrical and electronic applications.

Typical Applications

The outstanding strength, flexibility, and electrical properties of Mylar® type EL films make them well suited for many electrical and electronics applications. The good handling and winding characteristics make them especially suitable for coating, die cutting, embossing, and laminating operations.

Approvals

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
ELECTRICAL				
Breakdown Voltage	48	2.8	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	75	3.5	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	92	4.0	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	142	5.5	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	200	7.7	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	300	10.0	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	400	11.7	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
Breakdown Voltage	500	13.5	kV	ASTM D149 1/4" electrode 500 V/sec 25°C in air
OPTICAL				
Haze	48	4	%	ASTM D1003
Haze	75	5	%	ASTM D1003
Haze	92	16	%	ASTM D1003
Haze	142	18	%	ASTM D1003
Haze	200	24	%	ASTM D1003
Haze	300	29	%	ASTM D1003
Haze	400	37	%	ASTM D1003
Haze	500	43	%	ASTM D1003
PHYSICAL				
Elongation at Break MD	48	124	%	ASTM D882A
Elongation at Break MD	75	134	%	ASTM D882A
Elongation at Break MD	92	110	%	ASTM D882A

Elongation at Break MD	142	125	%	ASTM D882A
Elongation at Break MD	200	135	%	ASTM D882A
Elongation at Break MD	300	135	%	ASTM D882A
Elongation at Break MD	400	140	%	ASTM D882A
Elongation at Break MD	500	140	%	ASTM D882A
Elongation at Break TD	48	88	%	ASTM D882A
Elongation at Break TD	75	103	%	ASTM D882A
Elongation at Break TD	92	90	%	ASTM D882A
Elongation at Break TD	142	100	%	ASTM D882A
Elongation at Break TD	200	110	%	ASTM D882A
Elongation at Break TD	300	110	%	ASTM D882A
Elongation at Break TD	400	115	%	ASTM D882A
Elongation at Break TD	500	115	%	ASTM D882A
Tensile Strength MD	48	29	kpsi	ASTM D882A
Tensile Strength MD	75	31	kpsi	ASTM D882A
Tensile Strength MD	92	28	kpsi	ASTM D882A
Tensile Strength MD	142	28	kpsi	ASTM D882A
Tensile Strength MD	200	28	kpsi	ASTM D882A
Tensile Strength MD	300	27	kpsi	ASTM D882A
Tensile Strength MD	400	26	kpsi	ASTM D882A
Tensile Strength MD	500	27	kpsi	ASTM D882A
Tensile Strength TD	48	34	kpsi	ASTM D882A
Tensile Strength TD	75	36	kpsi	ASTM D882A
Tensile Strength TD	92	34	kpsi	ASTM D882A
Tensile Strength TD	142	34	kpsi	ASTM D882A
Tensile Strength TD	200	33	kpsi	ASTM D882A
Tensile Strength TD	300	31	kpsi	ASTM D882A
Tensile Strength TD	400	30	kpsi	ASTM D882A
Tensile Strength TD	500	30	kpsi	ASTM D882A
Yield (nominal)	48	41,300	in ² /lb	
Yield (nominal)	75	26,500	in ² /lb	
Yield (nominal)	92	21,800	in ² /lb	
Yield (nominal)	142	14,000	in ² /lb	
Yield (nominal)	200	9,900	in ² /lb	
Yield (nominal)	300	6,600	in ² /lb	
Yield (nominal)	400	5,000	in ² /lb	
Yield (nominal)	500	4,000	in ² /lb	
THERMAL				
Shrinkage MD (150°C)	48	2.0	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	75	2.0	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	92	1.9	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	142	1.5	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	200	1.3	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	300	1.2	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	400	1.1	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	500	1.1	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	48	1.5	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	75	1.4	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	92	1.1	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	142	1.0	%	Unrestrained @ 130°C/30 min
Shrinkage TD (150°C)	200	0.8	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	300	0.8	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	400	0.7	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	500	0.7	%	Unrestrained @ 150°C/30 min

Standard Put-ups

Core I.D. (Inches)	Roll O.D. (Inches)	Thickness (Gauge)	Length (Feet)
3	9 1/2	48	10,500
3	9 1/2	75	6,700
3	9 1/2	92	5,400
3	9 1/2	142	3,500
3	9 1/2	200	2,500
3	9 1/2	300	1,650
3	9 1/2	400	1,250
3	9 1/2	500	1,000
10 (Master roll)		48	63,000
10 (Master roll)		75	59,000
10 (Master roll)		92	47,700
10 (Master roll)		142	30,600
10 (Master roll)		200	21,950
10 (Master roll)		300	14,650

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10 (Master roll)		400	10,980
10 (Master roll)		500	8,850

Contact Info

DuPont Teijin Films U.S. Limited Partnership
3600 Discovery Drive
Chester, VA 23836 USA
Tel: (800) 635-4639
Fax: (804) 530-9867

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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