DuPont Teijin Films

MYLAR® A

Product Description

Mylar® A films are tough, general purpose films that are transparent in 48 through 92 gauge and translucent in heavier gauges. They have a rough surface to provide ease of handling, good adhesion, and processability. They are used for a broad range of industrial applications.

General Product Info

Mylar® A films have balanced tensile properties and excellent resistance to moisture and most chemicals. They can withstand temperature extremes from -100°F to 300°F. Mylar® does not become brittle with age under normal conditions, because it contains no plasticizers.

Special Features

Slit rolls are available in the following ID and OD configuration:

- 3" ID 9 1/2" OD
- 3" ID 13" OD
- 3" ID 16" OD 3" ID 18" OD
- 6" ID 11" OD
- 6" ID 14" OD
- 6" ID 16 1/2" OD
- 6" ID 18" OD

Master rolls are much longer lengths, splice free, and are available on 6 inch and 10 inch ID cores. Master rolls are available in minimum order quantities of 10,000 pounds per item.

Typical Applications

Mylar® A films are used extensively in a wide variety of markets. Some of them are:

- Apparel stays
- Book jackets
- Carbon ribbon
- Control Tape
- Drumheads
- Duct Liners
- Identifications
- Membrane touch switches
- Metallized Base
- Pressure Sensitive Labels (plain or metallized)
- Protective surfacing
- Release liners
- Roll leaf (hot stamping)
- Spirit Masters

Approvals

FDA Food Contact Status - All gauges of Mylar® A comply with the Food and Drug Administration regulation 21 CFR 177.1630 -- Polyethylene phthalate polymers. This regulation describes films which may be safely used in contact with all types of food excluding alcoholic beverages. Uncoated films such as Mylar® A can be used to contain foods during oven cooking or oven baking at temperatures above 250 °F. UL 94 VTM-2 - for 92-1400 gauge (0.023 - 0.35mm)

UL Recognition - for 92-500 gauge (0.023-0.13mm) HWI=5, HAI=4, CTI=1;

for 700-1400 gauge (0.18-0.35mm) HWI=4, HAI=0, CTI=1

Typical Properties

 Available Thickness [Gauge]

 48;
 75;
 92;
 142;
 200;
 300;
 400;
 500;
 750;
 900;
 1000;
 1200;
 1400

Property OPTICAL	Thickness	Value	Units	Test
Haze	48	4	%	ASTM D1003
Haze	75	15	%	ASTM D1003
Haze	92	16	%	ASTM D1003
Haze	142	9 - 29	%	ASTM D1003
Haze	200	13 - 37	%	ASTM D1003
Haze	300	14 - 50	%	ASTM D1003
Haze	400	20 - 55	%	ASTM D1003
Haze	500	21 - 60	%	ASTM D1003
PHYSICAL			<i></i>	
Elongation at Break MD	48	110	%	ASTM D882A
Elongation at Break MD	75	110	%	ASTM D882A
Elongation at Break MD	92	110	%	ASTM D882A ASTM D882A
Elongation at Break MD	142	125	% %	ASTM D882A
Elongation at Break MD	200 300	135 135	%	ASTM D882A
Elongation at Break MD	400	140	%	ASTM D882A
Elongation at Break MD Elongation at Break MD	500	140	%	ASTM D882A
Elongation at Break MD	750	140	%	ASTM D882A
Elongation at Break MD	900	150	%	ASTM D882A
Elongation at Break MD	1000	150	%	ASTM D882A
Elongation at Break MD	1400	170	%	ASTM D882A
Elongation at Break TD	48	70	%	ASTM D882A
Elongation at Break TD	75	90	%	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
Elongation at Break TD	750	115	%	ASTM D882A
Elongation at Break TD	900	130	%	ASTM D882A
Elongation at Break TD	1000	140	%	ASTM D882A
Elongation at Break TD	1400	170	%	ASTM D882A
Modulus	48 - 1400	507	kpsi	ASTM D822
Tensile Strength MD	48	26	kpsi	ASTM D882A
Tensile Strength MD	75	28	kpsi	ASTM D882A
Tensile Strength MD	92	28 28	kpsi	ASTM D882A ASTM D882A
Tensile Strength MD	142 200	28	kpsi kpsi	ASTM D882A
Tensile Strength MD 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 MD	750	27	kpsi	ASTM D882A
Tensile Strength MD	900	27	kpsi	ASTM D882A
Tensile Strength MD	1000	27	kpsi	ASTM D882A
Tensile Strength MD	1400	26	kpsi	ASTM D882A
Tensile Strength TD	48	32	kpsi	ASTM D882A
Tensile Strength TD	75	34	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
Tensile Strength TD	750	30	kpsi	ASTM D882A
Tensile Strength TD	900	29	kpsi	ASTM D882A
Tensile Strength TD	1000	29	kpsi	ASTM D882A
Tensile Strength TD	1400	25	kpsi	ASTM D882A
Yield (nominal)	48	41,300	in²/lb	
Yield (nominal) Yield (nominal)	75 92	26,500	in²/lb in²/lb	
Yield (nominal)	92 142	21,500 14,000	in²/lb	
Yield (nominal)	200	9,900	in²/lb	
Yield (nominal)	300	6,600	in²/lb	
Yield (nominal)	400	5,000	in²/lb	
Yield (nominal)	500	4,000	in²/lb	
Yield (nominal)	750	2,600	in²/lb	
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11/13/13			Datasheet	
Yield (nominal) Yield (nominal) Yield (nominal)	900 1000 1400	2,200 2,000 1,400	in²/lb in²/lb in²/lb	
THERMAL Shrinkage MD (150°C) Shrinkage MD (150°C)	48 75 92 142 200 300 400 500 750 900	2.0 2.0 1.9 1.5 1.3 1.2 1.1 1.1 1.1 1.6 1.6	% % % % % % %	Unrestrained @ 150°C/30 min Unrestrained @ 150°C/30 min
Shrinkage MD (150°C) Shrinkage MD (150°C) Shrinkage TD (150°C)	1000 1400 48 75 92 142 200 300 400 500 750 900 1000 1400	1.5 1.3 1.0 1.1 1.1 1.1 1.0 0.8 0.8 0.7 0.7 0.9 1.1 1.1 0.8	% % % % % % % % % %	Unrestrained @ 150°C/30 min 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
3	9 1/2	750	650
3	9 1/2	900	550
3	9 1/2	1000	500
3	9 1/2	1400	350

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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Datasheet

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