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 -100ºF to 300ºF. Mylar® does not become brittle with age under normal conditions, because it contains no plasticizers.

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 ºF.
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	Thickness	Value	Units	Test
OPTICAL				
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				
Elongation at Break MD	48	110	%	ASTM D882A
Elongation at Break MD	75	110	%	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 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	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 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	in^2/lb	
Yield (nominal)	75	26,500	in^2/lb	
Yield (nominal)	92	21,500	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	
Yield (nominal)	750	2,600	in^2/lb	
Yield (nominal)	900	2,200	in^2/lb	
Yield (nominal)	1000	2,000	in^2/lb	
Yield (nominal)	1400	1,400	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 MD (150°C)	750	1.6	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	900	1.6	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	1000	1.5	%	Unrestrained @ 150°C/30 min
Shrinkage MD (150°C)	1400	1.3	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	48	1.0	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	75	1.1	%	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 @ 150°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
Shrinkage TD (150°C)	750	0.9	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	900	1.1	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	1000	1.1	%	Unrestrained @ 150°C/30 min
Shrinkage TD (150°C)	1400	0.8	%	Unrestrained @ 150°C/30 min

SRP
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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.

CAUTION: Do not use in medical applications involving permanent implantation in the human body (DuPont Teijin Films Medical Policy). For other medical applications, see the Medical Caution Statement. DuPont Teijin Films accepts no liability for use of it's products in medical applications not reviewed and approved by DuPont Teijin Films or for product misuse. DuPont Teijin Films supplies products to an agreed specification and does not manufacture products designed specifically for medical end use.

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