DuPont Teijin Films™

MYLAR® HS

Product Description
Mylar® HS is an uncoated, transparent polyester film designed for heat shrink applications. It is commercially available in nominal 48, 65, 80 and 150 gauges.

General Product Info
Unlike most PET films, Mylar® HS is not heat stabilized and will shrink with considerable force when exposed to heat. Immersion of the film in boiling water will produce approximately 50 percent shrinkage. Because of its sensitivity to heat, special care must be exercised during any converting operation involving heat or drying to avoid unwanted premature shrinkage of Mylar® HS.

Special Features
All gauges of Mylar® HS can be supplied with corona treatment for improved bonding to inks and adhesives. DuPont Teijin Films offers this as Mylar® HST. The corona treated side is normally wound toward the core, however, this can be reversed upon request.

Typical Applications
Adhesive seamed, heat shrinkable tubing and contour bottom heat shrinkable bags made from unsupported Mylar® HS, and heat shrinkable heat sealed tubing and bags made from laminations of Mylar® HS and a suitable sealant web, are used for the packaging of poultry, meat and fish products.

Approvals
FDA Food Contact Status - All gauges of Mylar® HS 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® HS can be used to contain foods during oven cooking or oven baking at temperatures above 250°F.
UL Recognition - Product has been registered with Underwriters Laboratories

Disposal
Dispose of in compliance with federal, state and local regulations. Preferred options for disposal are (1) recycling, (2) incineration with energy recovery, and (3) landfill. The high fuel value of this product makes option No. 2 very desirable for material which cannot be recycled.

Typical Properties

Available Thickness [Gauge]
48; 65; 80; 150

Property	Thickness	Value	Units	Test
BARRIER				
Gas Permeability - O2, 24 hr	48	9	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (before shrinkage)
Gas Permeability - O2, 24 hr	48	4.5 - 6.0	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (after shrinkage)
Gas Permeability - O2, 24 hr	65	8	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (before shrinkage)
Gas Permeability - O2, 24 hr	65	4.5	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (after shrinkage)
Gas Permeability - O2, 24 hr	80	7	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (before shrinkage)
Gas Permeability - O2, 24 hr	80	3.0 - 4.0	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (after shrinkage)
Gas Permeability - O2, 24 hr	150	5	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (before shrinkage)
Gas Permeability - O2, 24 hr	150	2.0 - 3.0	cc/100 in²	ASTM D3985 22ºC/75% RH/1 ATM (after shrinkage)
WVTR	48	2.8	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	65	2.6	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	80	1.7	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	150	1.0	g/100 in²/day	ASTM F1249 38°C, 90% RH
OPTICAL				
Haze	48	6.0	%	ASTM D1003
Haze	65	10.5	%	ASTM D1003
Haze	80	12.0	%	ASTM D1003
Haze	150	12.0	%	ASTM D1003
PHYSICAL				
Elongation at Break MD	48	120	%	ASTM D882A
Elongation at Break MD	65	120	%	ASTM D882A
Elongation at Break MD	80	150	%	ASTM D882A
Elongation at Break MD	150	150	%	ASTM D882A
Elongation at Break TD	48	120	%	ASTM D882A
Elongation at Break TD	65	110	%	ASTM D882A
Elongation at Break TD	80	110	%	ASTM D882A
Elongation at Break TD	150	110	%	ASTM D882A
Modulus (Stiffness) MD	48 - 150	450	kpsi	ASTM D822
Modulus (Stiffness) TD	48 - 150	450	kpsi	ASTM D822
Tensile Strength MD (break)	48	25	kpsi	ASTM D882A
Tensile Strength MD (break)	65 - 150	31	kpsi	ASTM D882A
Tensile Strength TD (break)	48	25	kpsi	ASTM D882A

Tensile Strength TD (break)	65 - 150	34	kpsi	ASTM D882A
Unit Weight	48	10.4	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	65	14.0	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	80	17.3	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	150	32.3	lb/ream	ASTM E252 (0.5 m²)
Yield (nominal)	48	41,700	in²/lb	
Yield (nominal)	65	30,800	in²/lb	
Yield (nominal)	80	25,000	in²/lb	
Yield (nominal)	150	13,400	in²/lb	
THERMAL				
Shrinkage MD (Boiling Water)	48	50	%	ASTM D955 - 5 seconds in boiling water
Shrinkage MD (Boiling Water)	65	45	%	ASTM D955 - 5 seconds in boiling water
Shrinkage MD (Boiling Water)	80	45	%	ASTM D955 - 5 seconds in boiling water
Shrinkage MD (Boiling Water)	150	45	%	ASTM D955 - 5 seconds in boiling water
Shrinkage TD (Boiling Water)	48	50	%	ASTM D955 - 5 seconds in boiling water
Shrinkage TD (Boiling Water)	65	50	%	ASTM D955 - 5 seconds in boiling water
Shrinkage TD (Boiling Water)	80	50	%	ASTM D955 - 5 seconds in boiling water
Shrinkage TD (Boiling Water)	150	50	%	ASTM D955 - 5 seconds in boiling water

Standard Put-ups

Core I.D. (Inches)	Roll O.D. (Inches)	Thickness (Gauge)	Length (Feet)
3	9 1/2 ± 1/4	48	10,600
3	9 1/2 ± 1/4	65	7,800
3	91/2 ± 1/4	80	6,300
3	9 1/2 ± 1/4	150	3,400
3	13 ± 1/4	48	21,300
3	13 ± 1/4	65	15,700
3	13 ± 1/4	80	12,800
3	13 ± 1/4	150	6,800
3	18 ± 1/4	48	42,400
3	18 ± 1/4	65	31,300
3	18 ± 1/4	80	25,400
3	18 ± 1/4	150	13,600
6	11 ± 1/4	48	10,600
6	11 ± 1/4	65	7,800
6	11 ± 1/4	80	6,400
6	11 ± 1/4	150	3,400

6	14 ± 1/4	48	20,800
6	14 ± 1/4	65	15,400
6	14 ± 1/4	80	12,500
6	14 ± 1/4	150	6,700
6	18 ± 1/4	48	38,300
6	18 ± 1/4	65	28,300
6	18 ± 1/4	80	23,000
6	18 ± 1/4	150	12,300
6	22 1/2 ± 1/4	48	63,100
6	22 1/2 ± 1/4	65	46,600
6	22 1/2 ± 1/4	80	37,900
6	22 1/2 ± 1/4	150	20,200
6	24 ± 1/4	48	72,600
6	24 ± 1/4	65	53,700
6	24 ± 1/4	80	43,500
6	24 ± 1/4	150	23,300

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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