DuPont Teijin Films™

MYLAR® RL42

Product Description

Mylar® RL42 is a biaxially oriented polyester (OPET) with an ethylene vinyl acetate (EVA) heat seal layer. It is used as a heat sealable lidding film in packaging frozen and refrigerated foods. Mylar® RL42 is commercially available in nominal 50, 75, 100 and 150 gauges.

Mylar® RL42 is designed to produce strong seals to polypropylene (PP). Although designed especially to seal to polypropylene, Mylar® RL42 seals to a broad range of container substrates including amorphous polyester (APET, also PETG), semicrystalline polyester (CPET), polyester coated paperboard, polyvinylchloride (PVC), polyethylene (HDPE), and polystryrene (HIPS).

Mylar® RL42 has the same heat seal layer thickness as Mylar® RL32, but produces a stronger seal to polypropylene. Mylar® RL42 can produce tearing seals to polypropylene and other substrates under chilled conditions. Like the other "RL" types with EVA heat seal layer, Mylar® RL42 has a lower seal initiation temperature than lidding films with an amorphous polyester heat seal layer (e.g., Mylar® OL, OL2). This allows good seals to be made at higher line speeds (or using lower sealing temperatures).

Fig. 1

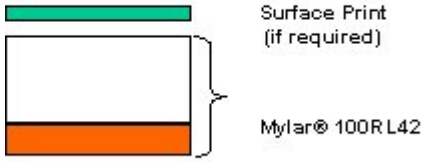

Fig. 2

Mylar® RL42 can withstand freezing temperatures down to -40°F, and foods can be heated or cooked in contact with this film at temperatures up to 400°F. The oriented polyester base film will begin to distort in the range of 425-450°F.

Special Features

Corona Treatment (Mylar® RL42T): Selected gauges of Mylar® RL42 are available with corona treatment (on the opposite side of film from the heat seal layer) to enhance printing and laminating. This film type is marketed by DuPont Teijin Films as Mylar® RL42T. The film is treated to an initial dyne level of 54. The dyne level of treated lidding films may decline with storage, and in-line corona treatment may be required during subsequent printing or laminating to increase the dyne level to a value adequate to get desired ink or laminate adhesion. Standard put-ups for Mylar® RL42T are the same as shown for Mylar® RL42.

Anti-fog (Mylar® RL42AF, RL42AT): Selected gauges of Mylar® RL42 lidding films are available with anti-fogging capability to provide better clarity when stored and displayed in refrigerated conditions. This film type is marketed by DuPont Teijin Films as RL42AF and is commercially available in nominal 50 and 100 gauges. Mylar® RL42AF is also available with corona treatment on the opposite side of film from the heat seal layer. This film type is marketed by DuPont Teijin Films as Mylar® RL42AT, and is commercially available in nominal 50 and 100 gauges.

Approvals

Food Contact Status - Please contact your DuPont Teijin Films representative to receive the Regulatory Compliance documents

Disposal

Disposal of Mylar® RL42 does not present special disposal problems. They can be buried as a relatively inert material in a landfill or burned in an incinerator with normal refuse. The incinerator should have sufficient draft to exhaust all combustion products through the stack to avoid exposure to irritating fumes. The disposal method should comply with local, state and federal regulations.

Typical Properties

Available Thickness [Gauge]
50; 75; 100; 150

Property	Thickness	Value	Units	Test
BARRIER				
Gas Permeability - O2, 24 hr	100	5	cc/100 in²	ASTM D3985 22ºC/50% RH/1 ATM
Gas Permeability - O2, 24 hr	150	3	cc/100 in²	ASTM D3985 22ºC/50% RH/1 ATM
Gas Permeability - O2, 24 hr	50	9	cc/100 in²	ASTM D3985 22ºC/50% RH/1 ATM
Gas Permeability - O2, 24 hr	75	7	cc/100 in²	ASTM D3985 22ºC/50% RH/1 ATM
WVTR	100	1.3	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	150	0.9	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	50	2.8	g/100 in²/day	ASTM F1249 38°C, 90% RH
WVTR	75	1.9	g/100 in²/day	ASTM F1249 38°C, 90% RH
PHYSICAL				
Elongation at Break MD	50 - 150	110	%	ASTM D882A
Elongation at Break TD	50 - 150	80	%	ASTM D882A
Modulus	50 - 150	550	kpsi	ASTM D822
Tear (Graves)	100	1.1	lb	ASTM D1004
Tear (Graves)	150	1.3	lb	ASTM D1004
Tear (Graves)	50	0.7	lb	ASTM D1004
Tear (Graves)	75	0.9	lb	ASTM D1004
Tensile Strength MD (break)	50 - 150	25	kpsi	ASTM D882A
Tensile Strength TD (break)	50 - 150	35	kpsi	ASTM D882A
Unit Weight	100	24.5	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	150	35.5	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	50	14.8	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	75	20.8	lb/ream	ASTM E252 (0.5 m²)
Yield (nominal)	100	17,700	in²/lb	
Yield (nominal)	150	12,200	in²/lb	
Yield (nominal)	50	29,200	in²/lb	
Yield (nominal)	75	20,800	in²/lb	

Standard Put-ups

Core I.D. (Inches)	Roll O.D. (Inches)	Thickness (Gauge)	Length (Feet)
3	9 1/2 ± 1/4	50	6,600
3	9 1/2 ± 1/4	75	4,900
3	9 1/2 ± 1/4	100	4,200
3	9 1/2 ± 1/4	150	2,900
3	13 ± 1/4	50	13,300
3	13 ± 1/4	75	9,800
3	13 ± 1/4	100	8,500
3	13 ± 1/4	150	5,900
6	11 ± 1/4	50	6,600
6	11 ± 1/4	75	4,900
6	11 ± 1/4	100	4,200
6	11 ± 1/4	150	3,000
6	14 ± 1/4	50	13,000
6	14 ± 1/4	75	9,600
6	14 ± 1/4	100	8,300
6	14 ± 1/4	150	5,800
6	18 ± 1/4	50	23,900
6	18 ± 1/4	75	17,700

6	18 ± 1/4	100	15,200
6	18 ± 1/4	150	10,700

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.

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.