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MYLAR®
RL53/RL53AF/RL53AT

Product Description

Mylar® RL53 is a biaxially oriented polyester (OPET) film 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® RL53 is commercially available in nominal 50 and 100 gauges.

Mylar® RL53 is designed to produce very good heat seals to a broad range of container substrates including amorphous polyester (APET, also PETG), semicrystalline polyester (CPET), polyester coated paperboard, polyvinylchloride (PVC), polyethylene (HDPE), polypropylene (PP), and polystyrene (HIPS). However, Mylar® RL53 produces weak seals to polypropylene at lower seal temperatures (below 350°F) - especially under chilled conditions. (RL "40 Series" films are recommended for these applications.)

Mylar® RL53 has the same type heat seal layer as Mylar® RL51, but the seal layer is thicker than both Mylar® RL51 and Mylar® RL52. Mylar® RL53 develops stronger seals than Mylar® RL52 to most substrates. It provides the strongest seal to polystyrene containers of all RL types. Seals made with Mylar® RL53 tend to be more ductile under refrigerated or frozen conditions versus RL33 or RL43. Mylar® RL53 is recommended for applications where light caulking is needed. Mylar® RL53 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).

Mylar® RL53 can withstand freezing temperatures down to -40°F.

Special Features

Corona Treatment (Mylar® RL53T): Selected gauges of Mylar® RL53 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® RL53T and is commercially available in nominal 50 and 100 gauges. 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® RL53T are the same as shown for Mylar® RL53.

Anti-fog (Mylar® RL53AF, RL53AT): Selected gauges of Mylar® RL53 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 RL53AF. Mylar® RL53AF 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® RL53AT.

Approvals

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

Disposal

Disposal of Mylar® RL53 does not present special disposal problems. It 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; 100

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	50	9	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	50	2.8	g/100 in²/day	ASTM F1249 38°C, 90% RH
PHYSICAL				
Elongation at Break MD	50 - 100	110	%	ASTM D882A
Elongation at Break TD	50 - 100	80	%	ASTM D882A
Modulus	50 - 100	550	kpsi	ASTM D822
Tear (Graves)	100	1.1	lb	ASTM D1004
Tear (Graves)	50	0.7	lb	ASTM D1004
Tensile Strength MD (break)	50 - 100	25	kpsi	ASTM D882A
Tensile Strength TD (break)	50 - 100	35	kpsi	ASTM D882A
Unit Weight	100	26.4	lb/ream	ASTM E252 (0.5 m²)
Unit Weight	50	16.9	lb/ream	ASTM E252 (0.5 m²)
Yield (nominal)	100	16,900	in²/lb	
Yield (nominal)	50	27,000	in²/lb	

Standard Put-ups

Core I.D. (Inches)	Roll O.D. (Inches)	Thickness (Gauge)	Length (Feet)
3	9 1/2 ± 1/4	50	5,700
3	9 1/2 ± 1/4	100	3,800
3	13 ± 1/4	50	11,400
3	13 ± 1/4	100	7,600
6	11 ± 1/4	50	5,700
6	11 ± 1/4	100	3,800
6	14 ± 1/4	50	11,100
6	14 ± 1/4	100	7,500
6	18 ± 1/4	50	20,500
6	18 ± 1/4	100	13,700

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.

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