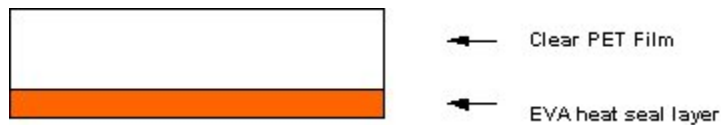




GPG 42

Product Description

Platinum® GPG42 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. Platinum® GPG42 is commercially available in nominal 50, 75, 100 and 150 gauges.



Platinum® GPG42 is designed to produce strong seals to polypropylene (PP). Although designed especially to seal to polypropylene, Platinum® GPG42 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 polystyrene (HIPS).

Platinum® GPG42 has the same heat seal layer thickness as Platinum® GPG42, but produces a stronger seal to polypropylene. Platinum® GPG42 can produce tearing seals to polypropylene and other substrates under chilled conditions. Like the other "GPG" types with EVA heat seal layer, Platinum® GPG42 has a lower seal initiation temperature than lidding films with an amorphous polyester heat seal layer (e.g., Platinum® OL, OL2). This allows good seals to be made at higher line speeds (or using lower sealing temperatures).

Fig. 1

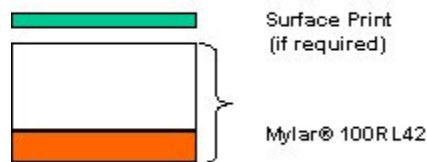


Fig. 2



Platinum® GPG42 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.

THE PLATINUM PACKAGING GROUP

Table 1 - Heat Seal Strength (grams/inch) to Various Container Substrates

Container Substrate	Ambient: 72°F (23°C) 50% RH			Refrigerator: 32°F (0°C)			Freezer: 0°F (-18°C)		
	Seal Bar Temperature			Seal Bar Temperature			Seal Bar Temperature		
	300°F (149°C)	350°F (177°C)	400°F (204°C)	300°F (149°C)	350°F (177°C)	400°F (204°C)	300°F (149°C)	350°F (177°C)	400°F (204°C)
APET	++	++	++	+	+	+	+	+	+
CPET	++	++	++	+	+	+	+	+	+
PVC	+++	+++	+++	++	++	++	++	++	++
HDPE	+++	+++	+++	+++	+++	+++	+++	+++	+++
PP	++	++	++	++	++	++	+	++	++
HIPS	++	+++	+++	++	++	++	++	++	++
Legend: + is 100 to 650 g/in; ++ 700 to 1250 g/in; +++ is 1300 to 1850 g/in; ++++ is > 1900 g/in									

* Seals made with a SENTINEL® heat sealer at 20 psi bar pressure with a 0.5 second dwell time and a 1 inch seal bar
 NOTE: These values are typical data for this Mylar® polyester film and are not intended for use as limiting specifications. For additional information contact your DuPont Teijin Films Representative

Special Features

Corona Treatment (Platinum® GPG42): Selected gauges of Platinum® GPG42 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 The Platinum Packaging Group as Platinum® GPG42. 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 Platinum® GPG42 are the same as shown for Platinum® GPG42.

Anti-fog (Platinum® GPG42): Selected gauges of Platinum® GPG42 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 The Platinum Packaging Group as GPG42 and is commercially available in nominal 50 and 100 gauges. Platinum® GPG42 is also available with corona treatment on the opposite side of film from the heat seal layer. This film type is marketed by The Platinum Packaging Group as Platinum® GPG42, and is commercially available in nominal 50 and 100 gauges.

Approvals

FDA Food Contact Status - All gauges of Platinum® GPG42 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. Platinum® GPG42 can be used to contain foods during oven cooking or oven baking at temperatures above 250°F.

Disposal

Disposal of Platinum® GPG42 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]

THE PLATINUM PACKAGING GROUP

50; 75; 100; 150

Property	Thickness	Value	Units	Test
BARRIER				
Gas Permeability - O ₂ , 24 hr	100	5	cc/100 in ²	ASTM D3985 22°C/50% RH/1 ATM
Gas Permeability - O ₂ , 24 hr	150	3	cc/100 in ²	ASTM D3985 22°C/50% RH/1 ATM
Gas Permeability - O ₂ , 24 hr	50	9	cc/100 in ²	ASTM D3985 22°C/50% RH/1 ATM
Gas Permeability - O ₂ , 24 hr	75	7	cc/100 in ²	ASTM D3985 22°C/50% RH/1 ATM
WVTR	100	1.3	g/100 in ² /day	ASTM F1249 38°C, 90% RH
WVTR	150	0.9	g/100 in ² /day	ASTM F1249 38°C, 90% RH
WVTR	50	2.8	g/100 in ² /day	ASTM F1249 38°C, 90% RH
WVTR	75	1.9	g/100 in ² /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 m ²)
Unit Weight	150	35.5	lb/ream	ASTM E252 (0.5 m ²)
Unit Weight	50	15	lb/ream	ASTM E252 (0.5 m ²)
Unit Weight	75	20.8	lb/ream	ASTM E252 (0.5 m ²)
Yield (nominal)	100	17,700	in ² /lb	
Yield (nominal)	150	12,200	in ² /lb	
Yield (nominal)	50	28,900	in ² /lb	
Yield (nominal)	75	20,800	in ² /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

THE PLATINUM PACKAGING GROUP

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

Disclaimer

Note: These values are typical performance data for The Platinum Packaging Groups' 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. The Platinum Packaging Group 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 ([The Platinum Packaging Group](#)). For other medical applications, see the [Medical Caution Statement](#). The Platinum Packaging Group accepts no liability for use of its products in medical applications not reviewed and approved by The Platinum Packaging Group or for product misuse. The Platinum Packaging Group supplies products to an agreed specification and does not manufacture products designed specifically for medical end use.

Melinex®, Platinum® and Melinex® ST™ are registered trademarks of The Platinum Packaging Group. Teijin® and Tetoron® are registered trademarks of Teijin Limited used under license by The Platinum Packaging Group. Teonex® is a registered trademark of The Platinum Packaging Group and is used under license by The Platinum Packaging Group.