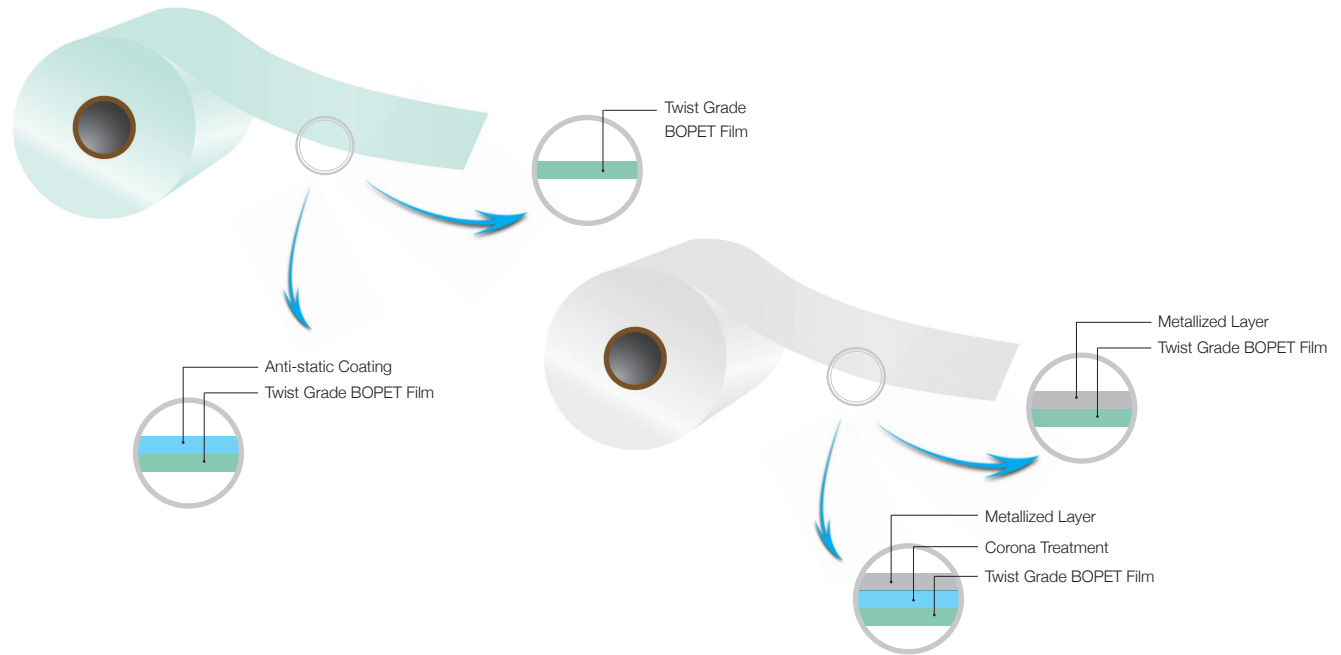


PETLAR-PTW (Transparent) & PTWM (Metallised) grades are Biaxially Oriented Twist Grade Polyester Films ideal for twist wrap packaging for confectionery Products. The films possess good mechanical, surface & thermal properties and ensures excellent processability and fold retention.

PETLAR-PTW/PTWM grades conform latest EC directives, REACH specifications and US FDA regulations for food contact applications. This grade is available in thickness range of 15 to 23 Micron (60-92 Gauge).



APPLICATIONS

- Twist Wrap for hard-boiled candies (HBCs), toffees, eclairs, mints & lozenges

Standard Roll Presentation - 6 Inch / 152 mm Core Diameter					
Thickness (Micron)		15	18	23	Approx Outer Roll Diameter (mm)
Length (Meters)	6000			475	
	9000			560	
	12000		580	650	
	18000	640	700		
	24000	735	800		
	36000				
	42000				
Width Range		400-2500 mm / 15-99 Inch			
Customised specs also available on request					

Standard Roll Presentation - 3 Inch / 76 mm Core Diameter					
Thickness (Micron)		15	18	23	Approx Outer Roll Diameter (mm)
Length (Meters)	6000	370	400	450	
	9000	450	485	545	
	12000	515			
	18000				
Width Range		400-1500 mm / 15-59 Inch			
Customised specs also available on request					

SRF Limited, Packaging Films Business

Block-C, Sector-45, Gurgaon-122003, Haryana, India Tel: (+91-124) 435 4400, Fax: (+91-124) 435 4500, pfbfilms@srf.com, www.srf.com



Indore: Plot No C 1-8, C 21-30, Indore Special Economic Zone, Pithampur - 454775, Distt. Dhar, Madhya Pradesh, India.

Kashipur: Plot No -12, Rampura, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar, Uttaranchal, India.

Rayong: D-20, Hemraj Eastern Seaboard Industrial Estate, 112, M003, Tambon Tasith, Amphur Pluakdaeng, Rayong Province 21140, Thailand.



Properties	Unit	Test Method	Product Code						
			PTW0150	PTW0180	PTW0230	PTWM0150	PTWM0180	PTWM0230	
GENERAL									
Nominal Thickness	Micron	SRF Method	15	18	23	15	18	23	
	Gauge		60	72	92	60	72	92	
Yield	m ² /kg		48	40	31	48	40	31	
	in ² /lb		33600	28000	22000	33600	28000	22000	
MECHANICAL									
Tensile Strength (min)	MD	kg/cm ²	2200	2200	2200	2200	2200	2200	
		(kpsi)	31	31	31	31	31	31	
	TD	kg/cm ²	2200	2200	2200	2200	2200	2200	
		(kpsi)	31	31	31	31	31	31	
Elongation at Break (min)	MD	%	ASTM D 882	100	100	100	100	100	
	TD			90	90	90	90	90	
SURFACE									
Coefficient of Friction	Static	-	ASTM D 1894	0.50	0.50	0.50	-	-	
	Dynamic	-		0.45	0.45	0.45	-	-	
Surface Energy	Plain Side	Dyne/cm	ASTM D 2578	44	44	44	-	-	
	Corona Side			52+	52+	52+	-	-	
	Coated			50	50	50	-	-	
THERMAL									
Shrinkage (150°C, 30 min)	MD	%	ASTM D 1204	30	30	30	30	30	
	TD			30	30	30	30	30	
OPTICAL, BARRIER & METAL BOND STRENGTH									
Haze	%	ASTM D 1003	3.0	3.0	3.0	-	-		
Transmittance			90	90	90	-	-		
Optical Density *	-	SRF Method	-	-	-	2.2	2.2		
WVTR (38°C & 90% RH)	gm/m ² /day	ASTM F 1249	<35	<30	<25	<1.0	<1.0		
	lb/100in ² /day		<2.2	<1.9	<1.6	<0.06	<0.06		
OTR (23°C & 0% RH)	cc/m ² /day	ASTM D 3985	<110	<90	<70	<1.0	<1.0		
	cc/100in ² /day		<6.9	<5.6	<4.4	<0.06	<0.06		
Metal Bond Strength	gm/25mm	SRF METHOD	-						

* As measured on Tobias Densitometer MD – Machine Direction | TD – Transverse Direction

Notes: 1) Metallized side is available wound inside/outside of the roll - customer to specify accordingly; 2) Metallization with Plasma Treatment for uniform and enhanced metal adhesion is available; 3) Above properties can be modified to suit customer's requirement; 4) Unless otherwise specified, the values given above are nominal.

DISCLAIMER

The information given above is known to the best of our knowledge and experience. Some of the properties can be changed as a result of supplier's effort to improve upon the quality of production efficiency of the subject. The information is believed to be the true and accurate and is not intended to violate any statutory condition or right of third party. SRF makes no warranty, express or implied, as to the fitness of the product for any specific use or purpose. The above data is purely for the readers' consideration, investigation and verification and should be read in conjunction with the conditions for sale or contract.