

POLO TBP CSL

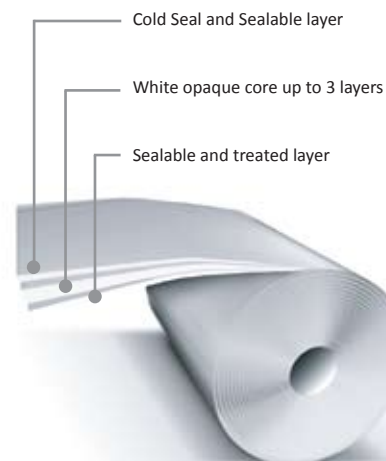
Bi-oriented cavitated polypropylene film with pearlescent white opaque finish for cold seal

MAIN CHARACTERISTICS

Opaque BOPP film with white pearlescent aspect, heat-sealable in both faces, one face treated and other specially prepared for cold seal.

APPLICATIONS

Monolayer or laminate structures for flexible packaging of ice cream, confectionery and chocolates with cold seal adhesive application.



TYPICAL PROPERTIES

Characteristics	Methodology	Unit	19 TBP CSL 32	22 TBP CSL 32	26 TBP CSL 32	
Thickness	DIN 53370	gauge	101.2	120	140	
		micron	25.3	29.3	34.7	
Unit Weight	ASTM D 4321	lb/ream	11.7	13.5	16.0	
		g/m ²	19.0	22.0	26.0	
Yield	ASTM D 4321	in ² /lb	37000	31900	27000	
		m ² /kg	52.6	45.5	38.5	
Tensile Strength	ASTM D 4321	MD	11600	11600	11600	
			80	80	80	
		TD	20300	20300	20300	
			140	140	140	
Elongation at break	ASTM D 882	MD	120	120	120	
		TD	40	40	40	
Gloss(45°)	ASTM D 2457	-	85	85	85	
Light Transmission	ASTM D 1003	%	29	29	29	
Sealing Strength	Film/Film Untreated/Untreated	ASTM F 88	g/in	350	390	400
Sealing Range	Film/Film Untreated/Untreated	ASTM F 88	°C	105-130	105-130	105-130
			°F	221-266	221-266	221-266
Shrinkage	ASTM D 1204	MD	3	3	3	
			TD	1	1	1
COF	Film/Film Untreated/Untreated	ASTM D 1894	-	0.30	0.30	0.30
Surface Treatment	ASTM D 2578	Internal	Absent	Absent	Absent	
		External	Min. 38	Min. 38	Min. 38	
WVTR	ASTM F 1249	73F/90%RH	gH ₂ O/(100in ² .24hs)	0.48	0.42	0.39
		38°C/90%RH	gH ₂ O/(m ² .day)	7.5	6.5	6.0
OTR	ASTM D 3985	73F/760 mm Hg 23°C / 1 atm	ccO ₂ /(100sq in ² .24hs)	161.0	148.0	122.0
			cm ³ O ₂ /(m ² .day)	2500	2300	1900

SUPPLY SPECIFICATIONS

Width	0/+2 mm or 0/+ 0.08 inches from standard width
Outside diameter	- 30 mm or 1.18 inches from standard diameter + 20 mm or 0.8 inches from standard diameter
Core	Core: 153 mm or 6.0 inches / 77 mm or 3.0 inches Tolerance: +1 mm or + 0.04 inches
Number of splice per reel	Maximum 2
Percentage of splices per order	Maximum 30%



Polo Indústria e Comércio Ltda. - Unigel
Phone: + 55 11 3478-5950 / Fax: + 55 11 3478-5999
e-mail: polofilms@polofilms.com.br
site: polofilms.net