

TSY.L82BIO

POLO SEAL

Transparent BOPP film
Heat-sealable at low initial temperature
Surface treatment for printing and/or lamination
Biodegradable

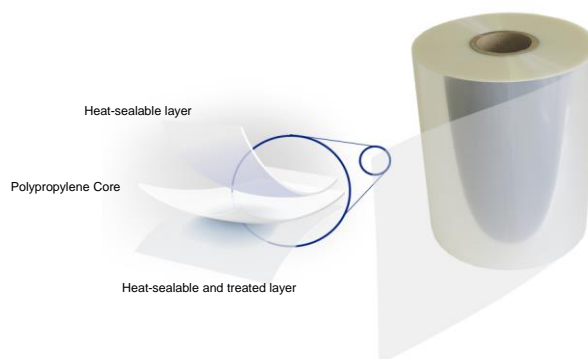


Main Characteristics

- Both sides heat-sealable, non-treated side from 82°C;
- Surface treatment on inner or outer layer;
- Excellent optical properties (gloss and transparency);
- Excellent performance in horizontal form-fill-seal and wrap-around packing machines;
- BOPP specially designed to biodegrade in environments anaerobic.

Typical Applications

- Flexible packaging for food: cookies, wafer grouping packaging;
- Non-food flexible packaging: A4 sheet reams;
- Provides increased productivity for filling or packing processes owing to decreased sealing time;
- Developed for HFFS - Horizontal Form Fill Seal and VFFS - Vertical Form Fill Seal filling or high-speed packing processes.



Properties	Methodology	Unit	Range	45TSYL82BIO	
Physical Properties					
Nominal Thickness	DIN 53370	µm	Target	45,0	
			Min.	42,8	
			Max.	47,3	
		Gauge	Target	177,2	
			Min.	168,3	
			Max.	186,0	
Unit Weight	ASTM D 4321	g/m ²	Target	40,7	
			Min.	38,7	
			Max.	42,8	
		lb/ream	Target	25,0	
			Min.	23,8	
			Max.	26,3	
Yield	ASTM D 4321	m ² /kg	Target	24,6	
			Min.	23,4	
			Max.	25,8	
		in ² /lb	Target	17264	
			Min.	16442	
			Max.	18172	
Surface Treatment	T	ASTM D 2578	dinas/cm	Target 42 Min. 38	
Coefficient of Friction	NT	ASTM D 1894	-	Target 0,30 Min. 0,25 Max. 0,35	
Optical Properties					
Haze	ASTM D 1003	%		Target 2,0 Max. 3,0	
Gloss (45°)	ASTM D 2457	u.b.		Target 95 Min. 85	
Mechanical Properties					
Tensile Strength	MD	ASTM D 882	N/mm ²	Target	140
	TD			Target	270
	MD		lb/in ²	Target	20305
	TD			Target	39160
Elongation at Break	MD	ASTM D 882	%	Target	210
	TD			Target	60
Shrinkage	MD	ASTM D 1204	%	Target	3
	TD			Target	1
Sealing Range	NT	ASTM F 88	°C	Target	82 - 130
			°F	Target	180 - 266
Sealing Strength	NT	ASTM F 88	g/25mm or gf/in	Target	600
				Min.	300
Barrier Properties					
TPVA 38°C / 90%RH	ASTM F 1249	g H ₂ O / (m ² .dia)	Target	≤ 6,0	
WVTR 100°F / 90%RH	ASTM F 1249	g H ₂ O / (100in ² .day)	Target	≤ 0.39	
TPO ₂ 23°C / 0%RH	ASTM D 3985	cm ³ O ₂ / (m ² .dia)	Target	≤ 2300	
OTR 73°F / 0%RH	ASTM D 3985	cm ³ O ₂ / (100in ² .day)	Target	≤ 148	

1. Acronyms:
MD: Machine Direction | TD: Transverse Direction;
NT: Non Treated Layer | T: Treated Layer.

2. Additional:
The restrained information in this datasheet represent typical data, and does not constitute genuine warranty liability as far as the product process and or application. In case of doubts or development of other thicknesses or applications, consult your dealer or send e-mail to: contato@polofilms.com.br.

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Food Contact Regulations

SEAL Family films comply with Mercosul, ANVISA, FDA (Food and Drug Administration) and the European Community legislations for applications involving direct contact with food. Full details are provided in the Declaration of Conformity. Customers intending to use SEAL Family films for applications intended to come into contact with food should request a copy of that document from POLO Films. The MSDS (Material Safety Data Sheet), as well as the evaluation of conformity for contact with food from other legislations are also available upon request. Contact your dealer for any questions.

Storage and Transportation Terms & Conditions

All products are stored and transported in dry, covered and clean environments.
It is recommended that storage and transportation take place at temperature around 30°C and 60% relative humidity.

If the temperature and humidity are not as recommended, the following issues may occur:
- Decreased level of surface treatment, leading to printing and/or lamination difficulties;
- Decreased film transparency;
- Too low CoF, making processing and machinability difficult.

BOPP films are recommended to be kept at operating room temperature for 24 hours before use.

Dimensional Specifications / Product Validity

Width	Minimum: 0 mm Maximum: 2 mm (from standard width)
Outer Diameter*	Minimum: 30 mm Maximum: 20 mm (from standard diameter)
Core	Minimum: 1 mm Maximum: 1 mm (from standard diameter)
Splices per roll	Maximum: 2
% of Splices per order	Maximum: 30%
Shelf Life (after production)	6 months

* For other dimensional information, consult your dealer.

Polo Films Nomenclature

Unit Weight or Thickness | Technology | Main Feature | Specialty | Sealing | Treatment | Biodegradable

45 TSY L8232BIO

Unit Weight/ Thickness

Expressed in g/m². Used for white/opaque films;
Expressed in µm. Used for transparent, matte and metallized films.

Technology

T - Tenter | C - Cast | P - BOPET.

Main Feature

SY - Transparent heat-sealable for printing and/or lamination.

Specialty

L82BIO - Initial sealing at 82 °C and Biodegradable.

Sealing

0 - Not Sealable;
1 - Sealing on the Inner Face;
2 - Sealing on the Outer Face;
3 - Sealing on both Sides.

Treatment

0 - No Treatment;
1 - Treatment on Inner Face;
2 - Treatment on Outer Face;
3 - Treatment on both Sides.