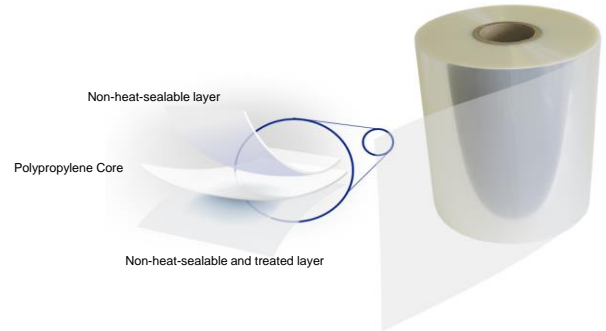


Main Characteristics

- Non-heat-sealable film;
- Surface treatment on inner or outer layer;
- Excellent optical properties (gloss and transparency);
- Low stretching properties providing high stiffness;
- Excellent performance and yielding in coaters owing to good planeness and low residual shrinkage.

Typical Applications

- Indicated for adhesive tapes.



Properties	Methodology	Unit	Range	17TFA	20TFA	22TFA	24TFA	25TFA	28TFA	30TFA	35TFA	
Physical Properties												
Nominal Thickness	DIN 53370	µm	Target	17.0	20.0	22.0	24.0	25.0	28.0	30.0	35.0	
			Min.	16.2	19.0	20.9	22.8	23.8	26.6	28.5	33.3	
			Max.	17.9	21.0	23.1	25.2	26.3	29.4	31.5	36.8	
		Gauge	Target	66.9	78.7	86.6	94.5	98.4	110.2	118.1	137.8	
			Min.	63.3	74.8	82.3	89.8	93.5	104.7	112.2	130.9	
			Max.	70.3	82.7	90.9	99.2	103.3	115.7	124.0	144.7	
Unit Weight	ASTM D 4321	g/m ²	Target	15.4	18.1	19.9	21.7	22.6	25.3	27.2	31.7	
			Min.	14.6	17.2	18.9	20.6	21.5	24.1	25.8	30.1	
			Max.	16.2	19.0	20.9	22.8	23.8	26.6	28.5	33.3	
		lb/ream	Target	9.5	11.1	12.2	13.3	13.9	15.6	16.7	19.5	
			Min.	9.0	10.6	11.6	12.7	13.2	14.8	15.8	18.5	
			Max.	9.9	11.7	12.8	15.0	14.6	16.3	17.5	20.4	
Yield	ASTM D 4321	m ² /kg	Target	65.0	55.2	50.2	46.0	44.2	39.5	36.8	31.6	
			Min.	61.9	52.6	47.8	43.8	42.1	37.6	35.1	30.1	
			Max.	68.4	58.2	52.9	48.5	46.5	41.5	38.8	33.2	
		in ² /lb	Target	45698	38844	35312	32370	31075	27745	25896	22196	
			Min.	43522	36994	33631	30828	29595	26424	24663	21139	
			Max.	48104	40888	37171	34073	32710	29206	27259	23365	
Surface Treatment	T	ASTM D 2578	dinas/cm	Target							40	
				Min.							38	
Coefficient of Friction	NT	ASTM D 1894	-	Target							0.45	
				Min.							0.20	
				Max.							0.65	
Optical Properties												
Haze	ASTM D 1003	%	Target							1.3		
			Max.							2.5		
Gloss (45°)	ASTM D 2457	u.b.	Target							95		
			Min.							85		
Mechanical Properties												
Tensile Strength	MD	ASTM D 882	N/mm ²	Target	160				140			
	TD			270								
	MD		lb/in ²	Target	23206				20305			
	TD			39160								
Elongation at Break	MD	ASTM D 882	%	Target	140	140	150	150	150	170	170	170
	TD			45				50				
Shrinkage	MD	ASTM D 1204	%	Target	3							
	TD			1								
Barrier Properties												
TPVA 38°C / 90%UR	ASTM F 1249	g H ₂ O / (m ² .dia)	Target							NA		
WVTR 100°F / 90%RH	ASTM F 1249	g H ₂ O / (100in ² .day)	Target							NA		
TPO ₂ 23°C / 0%UR	ASTM D 3985	cm ³ O ₂ / (m ² .dia)	Target							NA		
OTR 73°F / 0%RH	ASTM D 3985	cm ³ O ₂ / (100in ² .day)	Target							NA		

1. Acronyms:
MD: Machine Direction | TD: Transverse Direction;
NT: Non Treated Layer | T: Treated Layer;
NA: Not Applicable.

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.



Food Contact Regulations

PLAIN 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 PLAIN 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 | Sealing | Treatment
20TFA02

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.

Main Feature

FA - Adhesive tape.

Specialty

Not applicable.

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.