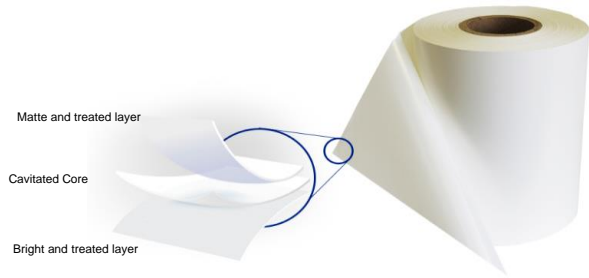


Main Characteristics

- Heat-sealable on the glossy side from 112°C;
- Internal and external surface treatment;
- One high-gloss white side and one matte side;
- High rigidity and low elongation;
- Cavitated film with high opacity;
- Great performance on flexographic, rotogravure, digital, ultraviolet and thermal transfer.

Typical Applications

- Self-adhesive labels and tags (Pressure Sensitive Label);
- Magazine Labels (WAL Cut & Stack);
- Decorative applications in general.



Properties	Methodology	Unit	Range	40TWOPSL
Physical Properties				
Nominal Thickness	DIN 53370	µm	Target	59.0
			Min.	56.0
			Max.	61.9
		Gauge	Target	236.0
			Min.	224.2
			Max.	168.0
Unit Weight	ASTM D 4321	g/m²	Target	40.0
			Min.	38.0
			Max.	42.0
		lb/ream	Target	24.5
			Min.	23.3
			Max.	25.8
Yield	ASTM D 4321	m²/kg	Target	25.0
			Min.	23.8
			Max.	26.3
		in²/lb	Target	17500
			Min.	16667
			Max.	18421
Surface Treatment	T	ASTM D 2578	dinas/cm	Target 40 Min. 38
Coefficient of Friction	MAT	ASTM D 1894	-	Target 0.35
				Min. 0.25
				Max. 0.50
Optical Properties				
Transmittance	ASTM D 1003	%	Target	17
			Max.	20
Gloss (45°)	MAT	ASTM D 2457	u.b.	Target 12
				Min.
Mechanical Properties				
Tensile Strength	MD	ASTM D 882	N/mm²	Target 90
	TD			Target 180
	MD		lb/in²	Target 13050
	TD			Target 26100
Elongation at Break	MD	ASTM D 882	%	Target 180
	TD			Target 35
Shrinkage	MD	ASTM D 1204	%	Target 3
	TD			Target 1
Sealing Range	BRI	ASTM F 88	°C	Target 112 - 130
			°F	Target 234 - 266
Sealing Strength	BRI	ASTM F 88	g/25mm or gf/in	Target 800
			Min.	350
Barrier Properties				
TPVA 38°C / 90%UR	ASTM F 1249	g H ₂ O / (m².dia)	Target	NA
WVTR 100°F / 90%RH	ASTM F 1249	g H ₂ O / (100in².day)	Target	NA
TPO ₂ 23°C / 0%UR	ASTM D 3985	cm³ O ₂ / (m².dia)	Target	NA
OTR 73°F / 0%RH	ASTM D 3985	cm³ O ₂ / (100in².day)	Target	NA

1. Acronyms:

MD: Machine Direction | TD: Transverse Direction;
T: Treated Layer | MAT: Matte Layer | BRI: Bright Layer;
NA: Not Applicable;
WAL: Wrap Around Label.

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

OPAQUE 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 OPAQUE 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

40T TWO PSL 23

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

WO - White Opaque.

Specialty

PSL - Self-adhesive labels and tags.

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.