

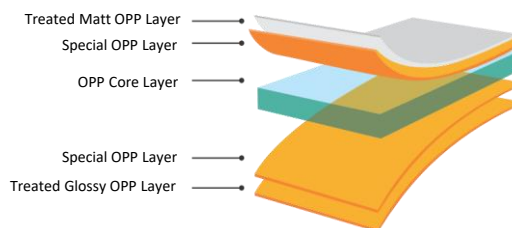
POLABLE 152LIQ

Both Sides Treated Film For IML Application

Matt BOPP Film

- Features:
- Excellent dimensional stability
 - Excellent lay-flat characteristics
 - Improved slip and anti-static characteristics for sheeting and die cutting
 - Excellent adhesion to solvent based, conventional off-set inks.

- Application:
- **Matt BOPP film**, for in-mold labelling. Suitable for sheet-fed and roll-fed printing.
 - Transparent or matt appearance after injection, **higher converting capability**.



Specification	Test Method	Unit	Test Direction	57μ
Yield	ASTM D4321	m ² /kg	-	20.4
Wetting Tension	ASTM D2578	Dyne/cm	Treated Side	≥ 38
Tensile Strength	ASTM D882	N/mm ²	MD	120
			TD	230
Elongation at Break	ASTM D882	%	MD	190
			TD	40
Thermal Shrinkage (120 °C, 5 min)	ASTM D1204	%	MD	≤ 4
			TD	≤ 2
Gloss	ASTM D2457	%	Matt Side	10
			Glossy Side	50
Density	ASTM D1505	gr/m ³	-	0.86
Dynamic C.O.F	ASTM D1894	-	Film-Film	0.4
			Film-Metal	0.3

MD: Machine direction, TD: Transverse direction

Available thicknesses: All thicknesses between 40-60 μ can be produced upon request.

POLFILM does not guarantee the typical values. Any data included herein is based on the analysis of representative samples and not the actual product shipped.

POLFILM strongly suggests that before any vast usage, make sure to study "Customer's Guide" and test our product in limited amounts. NO guarantee is made regarding information presented in this document. The user is solely responsible for all determinations regarding use and therefore POLFILM denies any responsibility for any loss or damage that may occur from the use of this information.

Storage and Handling:

- Films should be stored on the pallets in a closed dry place and should not be exposed to direct sunlight and heating sources, it means at a safe distance of not less than 1 meter.
- Storage temperature between 20°C to 35°C and in relative humidity less than 40-60% is recommended in order to minimize the deterioration of the film properties.
- The film should be kept in workplace at least 24 hours before being used.
- It is advisable to manage the inventory according to the delivery dates (first in – first out).
- For more information, please refer to the "customer's guide" document.

Indication of Surface Treatment:

- IML film is usually supplied with TWO sides treatment surface that is indicated on the label of each roll.

Printability/Injection Molding:

- A standard corona test pen should be used to check surface treatment before use of each roll.
- To check accurately of the surface treatment in laboratory, standard corona solution (ASTM D2578) or contact angle measurement (ASTM D5946) can be used.
- In case of PE injection plastic melt is used, ensure that the film will be suitable with associated injection molding proceed condition.
- It is recommended to prevent static charge, a minimum time interval of 2 weeks between film production time and sheeting process, and also 48-72 hours between sheeting and printing process.

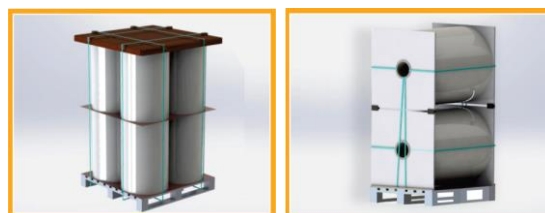
Standard Roll Dimension:

Core Inner Diameter (inch)	Roll Diameter (mm)	Dimension Width (mm)	Tolerance (mm)
3	520 - 540	30 up to 1650	- 0 & +3
6	720 - 770	280 up to 2400	

To calculate the diameter, length and weight of each roll, you can use the calculator on POLFILM website

Packaging:

- Films are packed vertically or horizontally on pallets.
- Normally, 6-inch rolls are palletized in horizontal direction and 3-inch rolls are palletized vertically depending on the width.
- Customized packaging will be available which should be agreed with our sales department before ordering.



Food Contact:

- This film complies with EU and FDA regulations. Specific documents and MSDS are available on request.