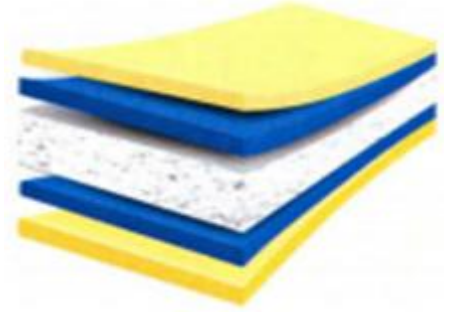
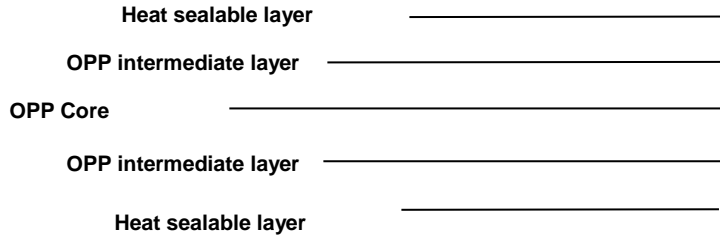


## ICO EX

### Transparent Coextruded Bi-oriented Polypropylene Film



#### Main Characteristics

- Two sides heat sealable with excellent hot tack
- High transparency
- Excellent ink adhesion on treated side.
- High resistance to oil, grease, chemical, puncture and abrasion

#### Typical Applications

- Rotogravure and flexographic printing
- Lamination (in particular low thickness film) both with itself and other film
- Single web structure (in particular high thickness film)
- Horizontal and vertical packaging machine (HFFS - VFFS)
- General overwrapping

#### Packing

	Core diameter		
Vertical	152 mm (6") 76 mm (3")	≤ 550 mm	≤ 700 mm – two or more rows >700mm - one row
Horizontal	152 mm (6") 76 mm (3")	≤ 770 mm	

#### Joints

Number of joints per reel	** max. 1 for reels up to 580 mm O/D ** max. 2 for reels 580 mm and up
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## ICO EX

Properties	Tolerance	Ref	Typical Values								Unit	Test Method
<b>Thickness</b>	(+ / -) 3%		15	17	18	20	25	30	35	40	micron	ASTM D 2673
<b>Unit Weight</b>	(+ / -) 3%		13.7	15.5	16.4	18.2	22.8	27.3	31.9	36.4	gm/m <sup>2</sup>	
<b>Yield</b>	(+ / -) 3%		73.3	64.6	61.1	55	44	36.6	31.5	27.5	m <sup>2</sup> /Kg	
<b>Tensile Strength</b>	Min.	MD	120								N/mm <sup>2</sup>	ASTM D882
	Min.	TD	240									
<b>Elongation At Break</b>	Max.	MD	200								%	
	Max.	TD	60									
<b>Coefficient Of Friction</b>	Max.	Film/film	0.3									ASTM D 1894
<b>Haze</b>	Max.		2.5								%	ASTM D 1003
<b>Gloss</b>	Min.		85								G.U.	ASTM D 2457
<b>Dimensional Stability</b>	Max.	MD	5								%	120°C - 5 min in air oven
	Max.	TD	3									
<b>Heat Seal Range ( Untreated Side )</b>			105 – 145								C	OPMA Method
<b>Heat seal Strength</b>	Min.	Film/film	200	200	200	200	200	250	250	300	Gm/cm	130C/1sec./1bar
<b>Water Vapour Permeability</b>	Max.		10.7	9.5	9.2	8.3	6.6	5.5	4.7	4.1	gm/ m <sup>2</sup> d	ASTM F1249 (38°C - 90% RH)
<b>Oxygen Permeability</b>	Max.		2700	2500	2400	2200	1800	1500	1300	1100	cm <sup>3</sup> / m <sup>2</sup> d	ASTMD3985 23°C 0% RH
<b>Density</b>			0.91								gm / cm <sup>3</sup>	ASTM D 1505
<b>Wetting Tension (Treatment)</b>	Min.		38								dyne /cm	ASTM D 2578
<b>Tolerance</b>												
<b>Weight</b>	< 1.0 Ton										± 20 %	
	> 1.0 Ton To < 10.0 Ton										± 10 %	
	> 10.0 Ton										± 5 %	
<b>Tolerance in width</b>	( + / - ) 2 mm											

### Film storage

It is recommended that the material is stocked in a dry area with a temperature below 30°C in order to restrain the deterioration of the film properties in general. The film is suitable for usage up to 6 months from the date of delivery.

### Treatment

The film is generally supplied outside treated TO. The film can be supplied inside treated TI or both sides TB depending on agreement with our sales department.

### Food Contact

The Film is compliant with EC and FDA regulations. Specific documents and safety data sheet are available upon request.

The above information is the result of laboratory test which are applied on samples from standard production. Since the varying conditions under which our products used are beyond our control, all of the above results are without guarantee and warranty.

Last update: 02/01/2022