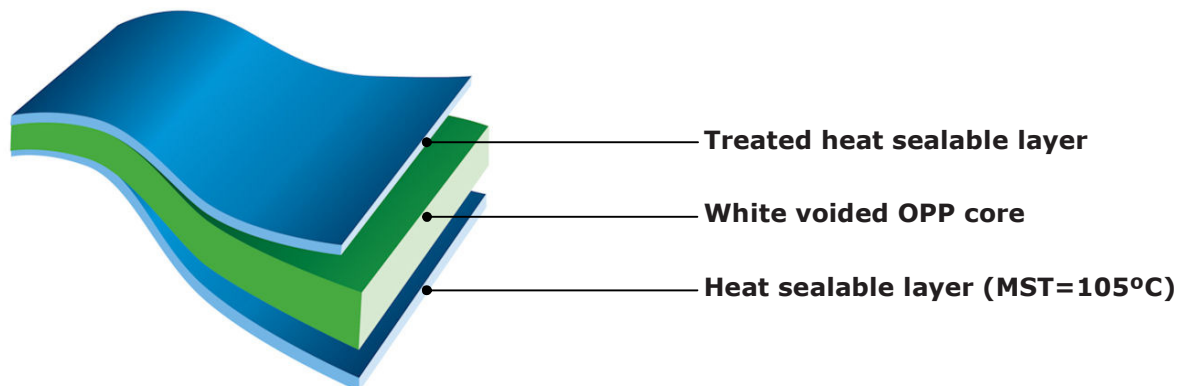




ESS

BoPP white voided film, both sides sealable, treated



PROPERTIES

- Pearlescent appearance
- High yield
- Good light protection
- Heat sealable on both sides
- Suitable for cold seal adhesives

TYPICAL APPLICATIONS

- Rotogravure and flexographic printing
- Lamination
- Single web structure
- HFFS & VFFS packaging

ROLL SIZE AVAILABILITY*

Film	Standard Length (m)	4x (m)	6x (m)	8x (m)
ESS 30	2,100	8,400	12,600	16,800
ESS 35	1,800	7,200	10,800	14,400
ESS 40	1,550	6,200	9,300	12,400
Outside diameter - core 76 mm	305 mm	588 mm	716 mm	825 mm
Outside diameter - core 152 mm	337 mm	605 mm	730 mm	838 mm

*Regional availability of roll sizes (multiples of standard length)-please refer to the corresponding Sales Representative

Properties	Method	Unit	Ref.	Typical values		
Nominal thickness	Internal method	µm		30	35	40
Unit weight		g/m ²		21.9	25.6	29.2
Yield		m ² /kg		45.7	39.1	34.2
Tensile strength	ASTM D882	N/mm ²	MD TD	60 150		
Elongation at break		%	MD TD	160 50		
Opacity	DIN 53146	%		78	80	82
Dynamic cof	ASTM D1894		NT/NT	0.35		
Heat seal range	Internal method	°C	NT/NT	105-140		
Seal strength	Internal method 130°C ;0.5 s	g/cm		150		
Treatment level	ASTM D2578	mN/m		38		
Water vapour permeability	ASTM F1249 (38°C - 90% RH)	g/m ² /d		6.0	6.0	5.5

Tolerance		
Weight	≤ 1.000 kg	± 20%
	1.001-10.000 kg	± 10%
	> 10.000 kg	± 5%

STORAGE, HANDLING AND APPLICATION

ESS film does not require special storage conditions. A storage temperature between 20°C to 30°C is recommended in order to minimise the deterioration of the film properties in general. It is advisable to turnover the inventory according to the delivery dates (first in-first out). The film should be conditioned in the operating environment for at least 24 hours before processing. ESS film is suitable for use up to 6 months from the date of production.

INDICATION OF SURFACE TREATMENT

ESS is usually supplied with treatment on the outside surface (TO).

ESS can also be supplied with treatment on the inside surface (TI). This must be agreed with our sales representative before processing the order.

FOOD CONTACT

ESS film complies with EC and FDA regulations. Specific document and MSDS are available upon request.

The property values represented in the table do not constitute product specifications, but represent the average or typical values. Use of this information is limited to the specific recipient. While the information is accurate to the best of our knowledge as of the date compiled, it is limited to the information as specified. No representation or warranty, expressed or implied, is made regarding the information, or its completeness or fitness to a particular use. The user is solely responsible for all determinations regarding use and we disclaim liability for any loss or damage that may occur from the use of this information. Ti does not guarantee the typical (or other) values.