



**BOPP CO-EX
PRINTING &
LAMINATION**

is widely used in packaging printing and laminating applications. TFI co-extruded film offers excellent machinability, low COF, good heat seal strength, good dimensional stability and flatness.

PRODUCT CODE
NO. OP - 101 R4

TECHNICAL DATA

TYPICAL PROPERTIES	UNIT	TEST METHODS	TYPICAL VALUE							
			15	18	20	25	30	40	50	
THICKNESS	Micron	Micrometer	15	18	20	25	30	40	50	
YIELD	m ² /kg (min.)	-	74.07	61.73	55.56	44.44	37.04	27.78	22.22	
DENSITY	g/cm ³	ASTM D-1505	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
AVERAGE THICKNESS VARIATION	% (max.)	ASTM E-252	± 3	± 3	± 3	± 3	± 3	± 3	± 3	
TENSILE STRENGTH	kg/mm ² (min.)	MD	ASTM	13	13	13	13	13	13	13
		TD	D-882	24	24	24	24	24	24	24
ELONGATION AT BREAK	% (max.)	MD	ASTM	200	200	200	200	200	200	200
		TD	D-882	70	70	70	70	70	70	70
THERMAL SHRINKAGE (120°C 15min.)	% (max.)	MD	ASTM	4.0	4.0	4.0	4.0	4.0	4.0	4.0
		TD	D-1204	2.0	2.0	2.0	2.0	2.0	2.0	2.0
KINETIC C.O.F.	film/film (max.)	ASTM D-1894	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
SEALING TEMPERATURE	°C	1 BAR 1 SEC	115	115	115	115	115	115	115	
SEALING STRENGTH	g/cm (min.)	-	100	100	100	150	200	200	200	
HALF DECAY TIME	second (max.)	STATIC HONEST METER	300	300	300	300	300	300	300	
HAZE	% (max.)	ASTM D-1003	2.0	2.5	2.5	3.0	3.0	3.5	4.0	
GLOSS (Angle 45°)	% (min.)	ASTM D-2457	75	75	75	75	75	75	75	
WVTR	g/m ² /24hr (max.)	ASTM F-1249	10	9	8	6	4	3	3	
O ₂ TR	cc/m ² /24hr (max.)	ASTM D-3985	2,600	2,200	2,000	1,800	1,600	1,400	900	
WETTING TENSION	Dyne/cm (min.)	ASTM D-2578	38	38	38	38	38	38	38	

DESCRIPTION OF SUPPLY

PAPER CORE I.D.	77 mm (3 in.) 153 mm (6 in.)
ROLL O.D.	max. 800 mm
WIDTH RANGE	100 mm - 1,500 mm. (other width on request)
LENGTH RANGE	STANDARD 4,000 m., 6,000 m. (other length on request)
JOINT	maximum 10% per order

Food approval : complied with FDA & EU regulations (on request)

Storage condition: should be keep at ambient temperature ~ 30°C and not over 40°C and keep in dry storage.

FURTHER TECHNICAL INFORMATION ON REQUEST

The above standard film properties are subjected to change and periodical modification without prior notice, please re-check for the most update version with our Sales & Marketing Department.