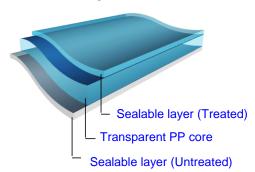


THAI FILM INDUSTRIES PUBLIC CO., LTD.

B-21a



BOPP CO-EX PRINTING & LAMINATION

Description:

This film is widely used in packaging printing and laminating applications. TFI film has both side heat sealable. It offers excellent machinability, good heat seal strength, good dimensional stability and flatness.

Characteristics:

Printability
Good dimensional stability
Less electro static on film surface

TECHNICAL DATA

UI	NIT	TEST METHODS	TYPICAL VALUE						
Micron		Progage	15	18	19	20	25	26	
m²/kg		-	73.26	61.05	57.84	54.95	43.96	42.26	
g/cm ³		ASTM D-1505	0.91						
%		ASTM E-252	± 3						
kg/mm ² (min)	MD TD	ASTM D-882	13 26						
%	MD	ASTM D-882	200						
(max)	TD	7.01W B 002	70						
AGE %	MD	Δ S.T.M. D-1204	4.0						
(max)	TD	A01101 D-1204	2.0						
NT/NT		ASTM D-1894	0.2 - 0.5						
°C		1 BAR 1 SEC	115 – 140						
g/15mm (min)		-	200						
Dyne/cm (min)		ASTM D-2578	38						
% (min)		ASTM D-2457	85						
% (max)		ASTM D-1003	2.5			3	3.0		
g/m ² /24hr (max)		ASTM F-1249	8			6			
cc/m ² /24hr (max)		ASTM D-3985	2000 1800					300	
	Mid m² g/d kg/mm² (min) % (max) NT g/15m Dyne/d % (g/m²/24	m²/kg g/cm³ % kg/mm² (min) MD (min) TD % MD (max) TD NT/NT °C g/15mm (min) Dyne/cm (min) % (min) % (max) g/m²/24hr (max)	METHODS Micron Progage m²/kg - g/cm³ ASTM D-1505 % ASTM E-252 kg/mm² (min) MD (max) MD (max) ASTM D-882 TD ASTM D-882 MD (max) ASTM D-1204 NT/NT ASTM D-1894 °C 1 BAR 1 SEC g/15mm (min) - Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 g/m²/24hr (max) ASTM F-1249	METHODS Micron Progage 15 m²/kg - 73.26 g/cm³ ASTM D-1505 % ASTM E-252 kg/mm² (min) MD (max) ASTM D-882 7D ASTM D-882 ASTM D-1204 % (max) MD (max) ASTM D-1204 NT/NT ASTM D-1894 ASTM D-1894 °C 1 BAR 1 SEC G/15mm (min) Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 g/m²/24hr (max) ASTM F-1249	MICTON METHODS Micron Progage 15 18 m²/kg - 73.26 61.05 g/cm³ ASTM D-1505 ASTM E-252 kg/mm² (min) MD (min) ASTM D-882 % (max) TD ASTM D-882 % (max) ASTM D-1204 NT/NT ASTM D-1894 °C 1 BAR 1 SEC g/15mm (min) - Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 2. g/m²/24hr (max) ASTM F-1249 8	Methods TYPICA Micron Progage 15 18 19 m²/kg - 73.26 61.05 57.84 g/cm³ ASTM D-1505 0 % ASTM E-252 3 kg/mm² MD (min) ASTM D-882 3 % MD (max) ASTM D-882 3 % MD (max) ASTM D-1204 3 NT/NT ASTM D-1204 0.2 NT/NT ASTM D-1894 0.2 g/15mm (min) - 2 Dyne/cm (min) ASTM D-2578 3 % (min) ASTM D-2457 3 % (max) ASTM D-1003 2.5 g/m²/24hr (max) ASTM F-1249 8	METHODS TYPICAL VALUE Micron Progage 15 18 19 20 m²/kg - 73.26 61.05 57.84 54.95 g/cm³ ASTM D-1505 0.91 kg/mm² MD ASTM E-252 ± 3 kg/mm² MD ASTM D-882 26 % MD ASTM D-882 70 % MD ASTM D-882 70 % MD ASTM D-1204 4.0 (max) TD 4.0 NT/NT ASTM D-1204 0.2 - 0.5 °C 1 BAR 1 SEC 115 - 140 g/15mm (min) - 200 Dyne/cm (min) ASTM D-2578 38 % (min) ASTM D-2457 85 % (max) ASTM D-1003 2.5 g/m²/24hr (max) ASTM F-1249 8	METHODS Micron Progage 15 18 19 20 25 m²/kg - 73.26 61.05 57.84 54.95 43.96 g/cm³ ASTM D-1505 0.91 kg/mm² MD ASTM D-2522 ± 3 kg/mm² MD ASTM D-882 13 (max) TD ASTM D-882 70 % MD ASTM D-882 4.0 (max) TD 4.0 NT/NT ASTM D-1204 2.0 NT/NT ASTM D-1894 0.2 - 0.5 °C 1 BAR 1 SEC 115 - 140 g/15mm (min) - 200 Dyne/cm (min) ASTM D-2578 38 % (min) ASTM D-2457 85 % (max) ASTM D-1003 2.5 3 g/m²/24hr (max) ASTM F-1249 8	

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), Allowance 0, +3 mm

COMBINATION WIDTH 6,000 mm

LENGTH RANGE STANDARD 4,000 m., 6,000 m. (other length on request)

JOINT maximum 10% per order

Food approval: Complied with US FDA & EU regulations (on request).

Storage condition: Should be kept in dry storage with temperature 30°C - 40°C.

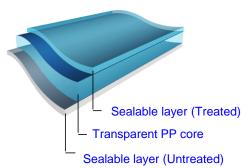
Disclaimer:

The information provided above is accurate to the best of our knowledge. It is however suggested that the customer confirms these values and product compatibility prior to their use. Thai Film Industries PCL offers no guarantees nor accepts any responsibility for the fitness of the product for any particular use. 18/10/2021



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TECHNICAL DATA

UN	IIT	TEST METHODS	TYPICAL VALUE						
Micron		Progage	30	35	40	41	45	50	
m²/kg		-	36.63	31.40	27.47	26.80	24.42	21.98	
g/cm ³		ASTM D-1505	0.91						
%		ASTM E-252	± 3						
kg/mm ²	MD	ASTM D-882	13						
(min)	TD	ASTIVI D-002	26						
% (max)	MD	ASTM D-882	200						
	TD	ASTIVI D-002	70						
9/ (may)	MD	ASTM D 1204	4.0						
% (IIIax)	TD	ASTNI D-1204	2.0						
NT/NT		ASTM D-1894	0.2 - 0.5						
°C		1 BAR 1 SEC	120 – 140						
g/15mr	n (min)	-	300						
Dyne/cm (min)		ASTM D-2578	38						
% (min)		ASTM D-2457	85						
% (max)		ASTM D-1003	3.0 3.5						
g/m ² /24hr (max)		ASTM F-1249	5	4	3				
cc/m ² /24	hr (max)	ASTM D-3985	1600	1500	1400 1200 900			900	
	Mic m², g/c 9/c (min) % (max) % (max) NT/ 9/c 15mr Dyne/c 16 % (r g/m²/24	$ \begin{array}{c c} m^2/kg \\ g/cm^3 \\ \hline & & \\ $	METHODS METHODS Methods Mode of the program Progage m²/kg - g/m² ASTM D-1505 ASTM E-252 ASTM D-882 kg/mm² MD (min) ASTM D-882 TD ASTM D-1204 NT/NT ASTM D-1204 NT/NT ASTM D-1894 °C 1 BAR 1 SEC g/15mm (min) - Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 g/m²/24hr (max) ASTM F-1249	METHODS Micron Progage 30 m²/kg - 36.63 g/cm³ ASTM D-1505 ASTM E-252 kg/mm² (min) MD (max) ASTM D-882 TD ASTM D-882 ASTM D-882 TD ASTM D-1204 ASTM D-1204 NT/NT ASTM D-1894 ASTM D-1894 °C 1 BAR 1 SEC G/15mm (min) Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 3 g/m²/24hr (max) ASTM F-1249 5	METHODS Micron Progage 30 35 m²/kg - 36.63 31.40 g/cm³ ASTM D-1505 - kg/mm² MD ASTM E-252 kg/mm² (min) MD ASTM D-882 TD ASTM D-882 - MO ASTM D-1204 - NT/NT ASTM D-1894 - °C 1 BAR 1 SEC - g/15mm (min) - - Dyne/cm (min) ASTM D-2578 % (min) ASTM D-1003 3.0 g/m²/24hr (max) ASTM F-1249 5 4	METHODS TYPICA Micron Progage 30 35 40 m²/kg - 36.63 31.40 27.47 g/cm³ ASTM D-1505 0. kg/mm² (min) MD ASTM D-882 1 TD ASTM D-882 2 M(max) ASTM D-1204 2 NT/NT ASTM D-1894 0.2 NT/NT ASTM D-1894 0.2 g/15mm (min) - 3 Dyne/cm (min) ASTM D-2578 3 % (max) ASTM D-1003 3.0 g/m²/24hr (max) ASTM F-1249 5 4	Micron Progage 30 35 40 41 m²/kg - 36.63 31.40 27.47 26.80 g/cm³ ASTM D-1505 0.91 % ASTM D-1505 0.91 kg/mm² MD ASTM D-882 ± 3 (min) TD 26 % (max) MD ASTM D-882 70 TD ASTM D-882 70 NT/NT ASTM D-1204 4.0 NT/NT ASTM D-1894 0.2 - 0.5 °C 1 BAR 1 SEC 120 - 140 g/15mm (min) - 300 Dyne/cm (min) ASTM D-2578 38 % (min) ASTM D-2457 85 % (max) ASTM D-1003 3.0 3 g/m²/24hr (max) ASTM F-1249 5 4	Micro	

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