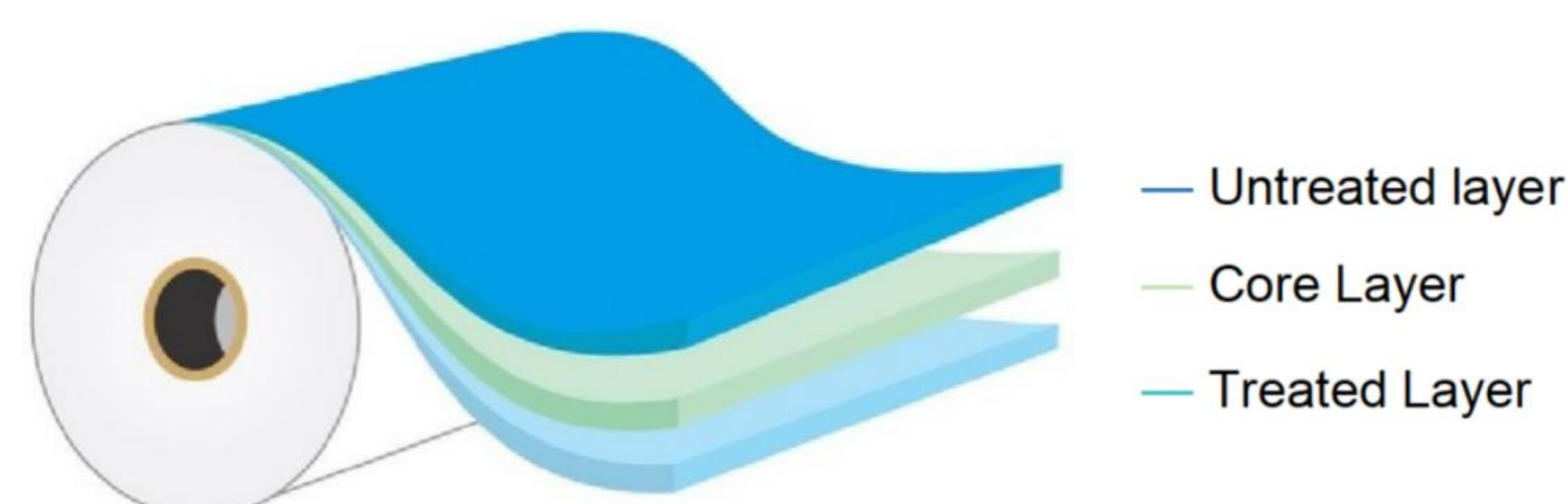


# Precise Printing Film

## 11Y 20 $\mu$ m

### Technical Data

#### Structure



#### Description

Transparent non-heat sealable film with high clarity and minimal crystal defects; inner side corona treated with surface energy  $\geq 38$  dyn/cm for enhanced printability and adhesion.

#### Application

Suitable for customer-specific full-area or screen printing (e.g., portraits, gradients), followed by lamination with other substrates for bag manufacturing.

Properties	Ref.	Units	ASTM #/ Test Method	11Y			
<b>Physical Data</b>							
Average Thickness		micron	D-374-C	18	20	25	30
		gauge		71	79	98	118
		mils		0.7	0.8	1.0	1.2
Thickness Variation		%( $\pm$ )		3			
Density		g/cc		0.905			
Average Substance		g/m		16.3	18.1	22.6	27.2
Surface tension(min)		dynes/cm	D-2578	$\geq 38$			
Kinetic COF	UT-UT		D-1894	0.20-0.30			
Yield		m <sup>2</sup> /Kg	D-4321	61.4	55.2	44.2	36.8
		in <sup>2</sup> /lb	D-4321	43160	38844	31075	25896
<b>Optical Data</b>							
Gloss(45)		gardner	D-2457	$\geq 95$			
Haze		%	D-1003	$\leq 1.3$			
<b>Mechanical Data</b>							
Tensile Strength	MD	kg/cm	D-882	120-160			
	TD			230-320			
Elongation at break	MD	%	D-882	140-180			
	TD			50-65			
<b>Thermal Data</b>							
Shrinkage (120°C/248F,5 min.)	MD	%	D-1204	2.0-4.0			
	TD			1.0-2.0			
HotTack Strength		g/15mm	@125°C @257°F	330			
<b>Barrier Data</b>							
MVTR(38°C,90%RH)		g/(m <sup>2</sup> ·day)	F-1249	4.0~5.4		2.5~4.0	
MVTR(10B,90%RH)		g/100i/day		0.26~0.35		0.16~0.26	

The values given in the above table are typical performance data for reference only.  
If you have special requirements for product performance indexes, please communicate with business manager.

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