



BOPET Film for Thermal Transfer Ribbons type TTR

1、 Characteristics

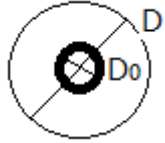
It is stretched in biaxial orientation by mean of flat film method by using imported polyethylene terephthalate in electrical grade. With good mechanical properties, and thermal characteristics, it has excellent engineering properties in coating process.

2、 Applications

As a kind of substrate, it is widely applied to a variety of bar code printing, advertising banner printing, label printing, photo printing and other industries.

3、 Specifications

Size (μm)	WMV (μm)	MMV (μm)	Test method
4.0	4.0 ± 0.1	$4.2 \pm 4\%$	GB/T 13542.2-2009/4
4.3	4.3 ± 0.1	$4.5 \pm 4\%$	
4.5	4.5 ± 0.1	$47 \pm 4\%$	

Width of the finished film roll	mm	700 \pm 2, 910 \pm 2, 1010 \pm 2 oras customer' s requirement 700 \pm 2, 910 \pm 2, 1010 \pm 2	
Inner diameter (D ₀)	mm	$\Phi 152.4$	
Outer diameter (D)	mm	350-550	

Note:For special specifications, please discuss with us separately.

4、 Thickness Representation

The nominal value of the film thickness is indicated by the central value (integer value, such as 3, 5, 7, 10, 15) of film thickness plus mantissa (one point after decimal point) or its code. Our nominal value for BOPET film thickness is represented in WMV.

5、 Technical features(typical value)

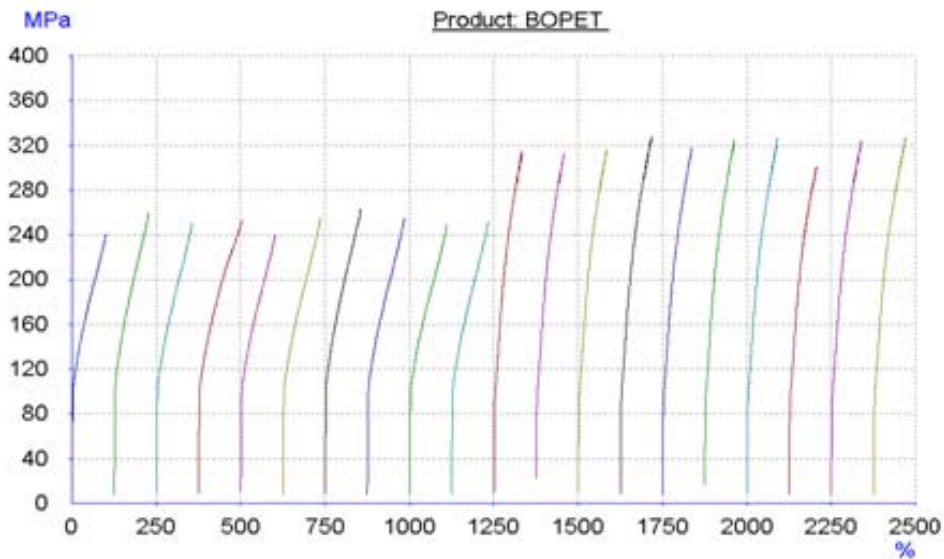
Item	Unit	Typical Values	Testing Standard	
Density	g/cm^3	1.400 ± 0.005	GB/T 13542.2-2009/11	
Melting Point	$^{\circ}\text{C}$	256	GB/T 13542.2-2009/23	
Tensile Strength	MD	MPa	240	GB/T 13542.2-2009/11
	TD	MPa	280	GB/T 13542.2-2009/11
Elongation at break	TM	%	100	GB/T 13542.2-2009/11
	TD	%	90	GB/T 13542.2-2009/11
Elastic Modulus	MD	MPa	3500	GB/T 13542.2-2009/11

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Thermal Shrinkage	MD	%	2.0	GB/T 13542.2-2009/23 (150°C/30min)
	TD	%	0.5	
Coefficient of Friction (Static/Sliding)			0.3-0.5	GB/T 10006-1988
Surface Roughness		μm	0.095±0.020	GB/T 13542.2-2009/8



The above parameters are non-technical agreement, for reference only.

5、Curve of tensile strength



7、Packaging

Two bags of desiccant and a label are put in each film roll. For preventing from any pollutant, each film roll shall be put into a plastic bag. And, foam gasket(about 4mm in thickness)shall be put to separate the wooden plate for protecting the end face of film roll. And then, the film roll is put into the carton with adhesive tape to seal. Each tray of products shall be wrapped with stretch film. (see below picture)





8、Storage

All kinds of vibration and shocks shall be avoided to the film rolls in storage and transportation. The rolls shall be stored not more than one year in a dry place. Temperature exceeding 30°C shall be avoided during transport and storage. If the film is stored for more than one year, the film properties shall be evaluated again.



9、 Labelling

Each roll is equipped with two labels, which are placed on the wooden plate and inside the bag, as below

Polyester Film

Type	TS12	Item No.	001239
Thickness	4.5	micron	
width	910	mm	
length	18500	m	
Weight	106.0	kg	
Core	6	inch	
Grade			
Splice	3000		
Roll No.	1160909090909-3		



TSF CO., LTD

Contents of label

label

The self-adhesive label in red and grey shall be used to distinguish the winding direction of film roll. The label containing the following contents shall be posted:

Name of product
Product model:sc44

SC44 ----- High-class products for SKC

TS12 ----- High-class products for sale at home

Specifications (thickness, width, length): 4.5µm (nominal thickness) , 910mm, 18500m

Weight (net weight): 106.0kg
Core: inner diameter of core: 6 inches
Grade of product: high-class product



Joints: no joints

Batch number and date of manufacture:2160524060101-2;

Description of film roll number

Film roll number is used to identify the date and position of each film roll.

(For example) Roll number:2160524060101-2

2160524060101-2

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Manufacturing machine No.

② Year of Production

③ Month of Production

④ Day of Production

⑤ Production lotnumber

⑥ Slitting number

⑦ Slitting position

⑧ Slitting machine (No.1 Slitting machine: no sign; No.2 Slitting machine: -2;
(No.3 Slitting machine: -3)