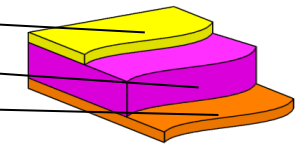


Non treated skin layer (OUT) with very low coefficient of friction and low heat sealing threshold
 Transparent oriented modified polypropylene
 Non treated skin layer (IN) with a bit higher coefficient of friction and low heat sealing threshold



DESCRIPTION:

Transparent heat shrinkable BOPP film with a wide heat sealing range and low coefficient of friction specially designed for cigarette and tea carton packs overwrapping in high speed machines.

Properties		Methods			Unit	TSHD			
Thickness, ± 5%		BIAXPEN			mkm	16	18	20	25
Density *					0,91				
Weight, ± 5%					g/m ²	14,56	16,38	18,2	22,75
Yield, ± 5%					m ² /kg	68,68	61,05	54,95	43,96
Tensile strength, not less	MD	GOST 14236	ISO 527	ASTM D882	N/mm ² , MPa	140			
	TD					260			
Elongation at break, not more	MD				180				
	TD				70				
Flexural modulus *	MD				2700				
	TD				4500				
Kinetic coefficient of friction	IN / IN	GOST 27492	ISO 8295	ASTM D 1894	---	0,20		± 0.05	
	OUT / OUT					0,15			
Thermal shrinkage at 120°C, 5min *	MD	GOST 18616	ISO 11501	ASTM D1204	%	8,5		± 1.0	
	TD					6,5			
Thermal shrinkage at 130°C, 15min *	MD					13		± 2.0	
	TD					13			
Heat Seal strength at 1bar, 1sec, 130°C, not less	IN / OUT	GOST 27319	ISO 527	ASTM D 882, ASTM F 88	N/15mm	2,5			
Haze, no more		GOST 15875	ISO 14782	ASTM D 1003	%	2,8			
Gloss at 45°, not less	OUT	BIAXPEN	ISO 2813	ASTM D 2457	%	85			
Heat sealing range at 1bar, 1sec.*	OUT/ OUT	BIAXPEN			°C	105 - 140			

MD - Machine, longitudinal direction of the film;
 TD - Transverse direction of the film.;

IN - internal film side of the reel;
 OUT- external film side of the reel;

* Typical value;
 GOST - Russian Federation standards.

MAIN PROPERTIES:

- Scratch and abrasion resistant;
- Contains antistatic and slip-antilock additives;
- non symmetric coefficient of friction of the film for packs tight overwrapping;
- stable low coefficient of friction, including the heated surfaces;
- medium shrinkage film;
- excellent optical properties;
- good physical and mechanical properties and high stiffness;
- intended for contact with food;
- without coating.

APPLICATION:

- For carton cigarette packs overwrapping, including on ultra high speed machines with speed up to 1000p/min.
- overwrapping of the "rigid" cardboard packs on the horizontal high speed machines;
- for tight carton packs overwrapping due to shrinkability of the film;
- wrapping cardboard packs of tea, zephyr, cigarette cardboard blocks, etc.;
- mainly for machines with heat tunnel;
- also for machines without a heat tunnel in which the shrinkage of the film occurs due to heating of the weld.
- for tight overwrapping of small and medium-sized carton packs;

Attention! Information specified in this document is for reference only; it contains averaged technical characteristics of BIAXPEN LTD products based on results of laboratory tests performed in BIAXPEN LTD standard operation conditions. BIAXPEN LTD gives no representations and/or warranties and is expressly relieved from any liability for infringement of any third parties' intellectual property rights arising from processing of BIAXPEN LTD products.

Testing of BIAXPEN LTD products in order to determine their suitability in terms of meeting specific objectives of a person intending to purchase BIAXPEN LTD products is the sole responsibility of such a person who shall be responsible for any consequences related to processing and use of BIAXPEN LTD products.

This document does not constitute a quotation and its provision to any person shall not create any rights and duties on the part of BIAXPEN LTD.