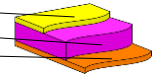


Non treated skin layer (OUT) with very low coefficient of friction and low heat sealing threshold
 Transparent oriented modified polypropylene
 Non treated skin layer (IN) with a bit higher coefficient of friction and low heat sealing threshold



DESCRIPTION:

Transparent high-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	TSHS			
Thickness, ± 5%		BIAXPEN			mkm	18	20		
Density *							g/cm ³	0,91	
Weight, ± 5%							g/m ²	16,38	18,2
Yield, ± 5%							m ² /kg	61,05	54,95
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 130°C, 15min *	MD	10		± 2,0					
	TD	17							
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;

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