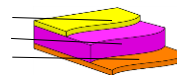


Non treated skin layer with very low coefficient of friction and low heat sealing threshold (UT)
Transparent oriented modified polypropylene
Corona treated skin layer with a higher coefficient of friction and low heat sealing threshold (T)



DESCRIPTION :

Heat shrinkable transparent corona treated BOPP film with a wide heat sealing range and low coefficient of friction designed for printing for cigarette and other carton packs overwrapping in high speed machines.*

Properties		Methods			Unit	TSHT						
Thickness, ± 5%		BIAXPEN			mkm	16	18	20	25			
Density *					g/cm ³				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	150						
	TD					260						
Elongation at break, not more	MD								180			
	TD								70			
Flexural modulus *	MD					2700						
	TD					4500						
Kinetic coefficient of friction	UT / UT	GOST 27492	ISO 8295	ASTM D 1894	---	0,15		± 0.05				
Thermal shrinkage at 120°C, 5 min *	MD	GOST 18616	ISO 11501	ASTM D1204	%	8,5		± 1.0				
	TD					6,5						
Thermal shrinkage at 130°C, 15min	MD					12		± 2.0				
	TD					12						
Heat Seal strength at 1bar, 1sec, 130°C, not less	T / UT	GOST 27319	ISO 527	ASTM D 882, ASTM F 88	N/15mm	2.0						
Haze, no more		GOST 15875	ISO 14782	ASTM D 1003	%	2,8						
Gloss at 45°, not less	UT	BIAXPEN	ISO 2813	ASTM D 2457	%	85						
Heat sealing range at 1bar, 1sec.*	UT / UT	BIAXPEN			°C	105 - 140						
Treatment level, not less	T	BIAXPEN	ISO 8296	ASTM D 2578	Dyne/cm, mN/m	38 **						

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

T - treated side of the film;
UT - untreated side of the film;

* Typical value;
GOST - Russian Federation standards.

** To be measured after n-heptane treatment

MAIN PROPERTIES:

- Scratch and abrasion resistant;
- treated for printing;
- 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 or primer;
- when the shipment is for the printing, activation is OUT (specify in order);
- when the shipment is for the packaging wrapping, activation is IN (specify in order).



APPLICATION:

- For carton cigarette packs overwrapping, including on ultra high speed machines with speed up to 1000p/min.
- For solvent based flexographic and rotogravure printing with special inks;
- 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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