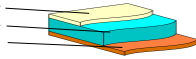


Treated modified heat sealable copolymer skin layer  
Transparent oriented polypropylene core layer  
Heat sealable, non treated skin layer with low seal intention temperature and high coefficient of friction



**DESCRIPTION:**

Heat-sealing transparent BOPP film with a low threshold of welding, with high coefficient of friction for a special purposes, for high quality rotogravure and flexographic printing and lamination.

Properties		Methods			Unit	HGFL										
						15	18	20	25	30	35	40	48			
Thickness, ± 5%		BIAXPLEN			mkm	0,91										
Density *								g/cm <sup>3</sup>								
Weight, ± 5%								g/m <sup>2</sup>	13,65	16,38	18,20	22,75	27,30	31,85	36,40	43,68
Yield, ± 5%								m <sup>2</sup> /kg	73,26	61,05	54,95	43,96	36,63	31,40	27,47	22,89
Tensile strength, not less	MD	GOST 14236	ISO 527	ASTM D882	N/mm <sup>2</sup> , MPa	130		140								
	TD					230		250								
Elongation at break, not more	MD								220			200				
	TD								80			70				
Kinetic coefficient of friction	UT / UT	GOST 27492	ISO 8295	ASTM D 1894	- - -	0,45						+ 0,20 - 0,05				
Thermal shrinkage at 120°C, 5 min, not more	MD	GOST 18616	ISO 11501	ASTM D1204	%	5	4									
	TD					3	2									
Heat sealing strength at 130°C, 1bar, 1 sec, not less	UT/UT	GOST 27319	ISO 527	ASTM D 882, ASTM F 88	N/15mm	2,0	2,2	2,3	2,5	2,8						
Haze, not more		GOST 15875	ISO 14782	ASTM D 1003	%	2,5		3,0			3,2					
Gloss at 45°, not less	T	BIAXPLEN	ISO 2813	ASTM D 2457	%	85										
Heat sealing range at 1bar, 1sec.*	UT/UT	BIAXPLEN			°C	105 - 140										
Treatment level, not less	T	BIAXPLEN	ISO 8296	ASTM D 2578	Dyne/cm, mN/m	38										
Water vapour transmission rate at 38°C, 90% rel.humidity, 24h, ± 20% *		BIAXPLEN	- - -	ASTM F 1249	g/m <sup>2</sup> /24h	8,7	7,2	6,5	5,2	4,3	3,7	3,3	2,7			
Oxygen transmission rate at 23°C, 0% rel.humidity 24h, ± 20% *		BIAXPLEN	- - -	ASTM D 3985	cm <sup>3</sup> /m <sup>2</sup> /24h	3533	2944	2650	2120	1767	1514	1325	1104			

MD - Machine, longitudinal direction;  
TD - Transverse direction

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

\* Typical value  
GOST - Russian Federation standards.

**MAIN PROPERTIES:**

- A wide range of heat sealing;
- contains antistatic and antiblocking additives;
- excellent optical properties;
- good mechanical properties;
- intended for contact with food;
- high coefficient of friction stable in time;
- without coatings and primers.

**APPLICATION:**

- High quality solvent based rotogravure and flexographic printing;
- solvent based and solvent free lamination with polyurethane adhesives;
- manufacture of flexible packaging for food products;
- for vertical VFFS and horizontal HFFS packaging machines;
- laminating with PE and CPP films with a high content of slipping additives;
- to reduce the impact of slip additives transition from PE or CPP film to the BOPP film side, which leads to a significant coefficient of friction reduction. The high coefficient of friction of the HGFL film, provides a certain margin in this case.
- for a case in which the bondage process of packed products is present, for example, in pasta packaging;
- to save the packed packages in a single group without sliding over each other (if necessary);
- in the other cases, when slip reduction on BOPP side of the flexible packaging is necessary;
- for cold seal glue frame coating onto UT film side (if necessary).

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