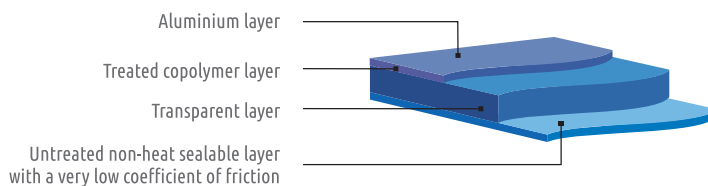


## Description

**BOPP film metallized on a transparent base, heat sealable with an average seal threshold with, a low coefficient of friction with activation on one side, with a long activation retention period, for printing, lamination and packaging, in cases requiring an increase in the packaging speed**



Properties	Unit	Limit	Method	Value					
Thickness*	µm	±5%	ISO 4591, 4593 GOST 17035	15	20	25	30	35	40
Density	g/cm <sup>3</sup>	±10%	WATERFALL PRO	0,91					
Weight m <sup>2</sup> *	g/m <sup>2</sup>	±5%	GOST 13199	13,65	18,20	22,75	27,30	31,85	36,40
Tensile strength*	MD	N/mm <sup>2</sup> (Мпа)	not less	ASTM D882 ISO 527 GOST 14236	130				
	TD				230				
Elongation at break*	MD	%	not more	ASTM D1894 GOST 27492	220				
	TD				80				
Kinetic coefficient of friction	UT / UT	-	±0,10	0,2					
Shrinkage at 120°C, 5 мин*	MD	%	not more	ASTM D1204	5	4			
	TD				3	2			
Heat sealing strength at 115°C, 1 bar, 1 sec.*	UT / UT	N/15 mm	-	ASTM F88/F88M, D882 ISO 527	2,0				
Minimal heat sealing temperature not less than 1H/15mm at 1 bar, sec.*	UT / UT	°C	-	WATERFALL PRO	105				
Surface tension	T	mN/m (dyn/cm)	not less	ASTM D2578 ISO 8296	36				
Optical density	-	OD	not less	WATERFALL PRO	1,8				
WVTR-water vapour transmission rate at 38°C, 90% rel. humidity, 24 h	g/m <sup>2</sup> /24 h	not more	ASTM F1249	1,0					
OTR-oxygen transmission rate at 23°C, 0% rel. humidity, 24 h	cm <sup>3</sup> /m <sup>2</sup> /24 h	not more	ASTM D3985	100					
MD – machine direction TD – transverse direction		T – treated side UT – untreated side		* indicators are measured on BOPP film – base for metallization					

### Main characteristics

- long-term activation
- excellent adhesion of aluminium cover
- excellent optical properties
- excellent barrier properties
- stable regular coefficient of friction

### Application

- for improvement of barrier properties of package
- for wrap-around label for bottles
- [For packing](#)
  - on the high-speed HFFS and VFFS packaging machines
  - with hot (heat sealing) and cold (using cold glue) seal formation
  - Flow-Pack
- [For lamination](#)
  - with other films and materials in duplex, triplex
  - with method of the solvent or nonsolvent (extrusion) lamination
- [For printing](#)
  - high-quality rotogravure and flexographic print
  - using solvent paint

### Storage

- films should be stored on the pallets in a closed dry place and should not be exposed to direct sunlight, at a safe distance of not less than 1 m from heating devices or anything that can cause damage the package
- the film should be kept in workplace not less than 48 hours before being used
- guaranteed storage period – 6 months from production date

### Treatment

- the guaranteed period for maintaining the minimum permissible level of surface tension on the activated film surface from the date of manufacture, subject to proper storage conditions, is 3 months
- in the interests of minimizing the deterioration of surface dressing level, it is recommended to store the film at a temperature of no higher than 30°C and use it in a short time

### Recycling

- it's recommended to use primer when printing on metallized surface

### Reeling

- maximum roll diameter 800 mm
- film width in a roll from 290 to 2000 mm
- diameter of paper cores (inside) 76, 152 mm

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