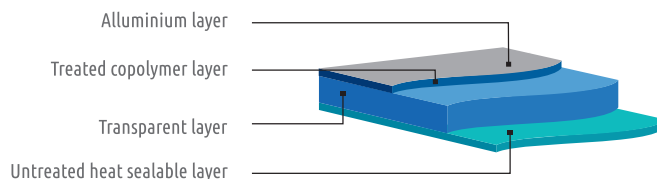


Description

Metallized BOPP film with high barrier properties, on a transparent base, heat sealable with an average sealing threshold, with activation on one side, with a long activation retention period, for printing, lamination and packaging, in cases requiring high barrier properties



| Properties | Unit | Limit | Method | Value | | | | | |
|--|---------------------------------------|---|------------------------------|--|-------|-------|-------|-------|-------|
| Thickness* | µm | ±5% | ISO 4591, 4593 GOST 17035 | 18 | 20 | 25 | 30 | 35 | 40 |
| Density | g/cm ³ | ±10% | WATERFALL PRO | 0,91 | | | | | |
| Weight m ² * | g/m ² | ±5% | GOST 13199 | 16,38 | 18,20 | 22,75 | 27,30 | 31,85 | 36,40 |
| Tensile strength* | MD | N/mm ² (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 | ASTM D1894 GOST 27492 | 0,3 | | | | |
| Shrinkage at 120°C, 5 мин* | MD | % | not more | ASTM D1204 | 5 | 4 | | | |
| | TD | | | | 3 | 2 | | | |
| Heat sealing strength at 120°C, 1 bar, 1 sec.* | UT / UT | N/15 mm | not less | 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 | 2,5 | | | | |
| WVTR-water vapour transmission rate at 38°C, 90% rel. humidity, 24 h | g/m ² /24 h | not more | ASTM F1249 | 1,0 | | | | | |
| OTR-oxygen transmission rate at 23°C, 0% rel. humidity, 24 h | cm ³ /m ² /24 h | not more | ASTM D3985 | 50 | | | | | |
| MD – machine direction TD – transverse direction | | T – treated side UT – untreated side | | * indicators are measured on BOPP film – base for metallization ** these are typical values, guaranteed for the untreated side only. When processing on both sides, this value is not regulated | | | | | |

Main characteristics

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

Application

- for packaging of products which require high barrier properties: biscuits, chips, waffles and etc.
- for extension of products storage period

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
- 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

Attention! Information specified in this document is for reference only; it contains averaged technical characteristics of Waterfall Pro LLC products based on results of laboratory tests performed in Waterfall Pro LLC standard operation conditions. Waterfall Pro LLC 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 Waterfall Pro LLC products.

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