

TECHNICAL DATA SHEET

VapLay



DESCRIPTION

VapLay provides excellent water vapor barrier performance for eco-friendly packaging products based on paper, paperboard, PET and bioplastics.

This product reduces water vapor permeation and oil & grease penetration, as well as reduced water absorption values. Additionally, VapLay offers heat sealability.

It can be applied as a single barrier layer or over HydroShield's oxygen barrier products.

PROPERTIES

VALUE

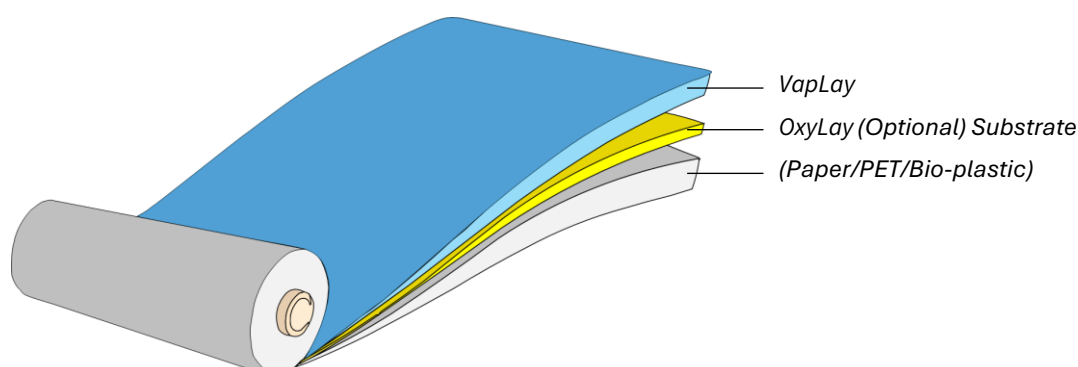
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|--|------------------|
| Product form | Water suspension |
| Solid content (wt%) | 40 ± 5 |
| pH | 5-10 |
| Viscosity (cP, Brookfield, S63, 100 rpm, RT) | < 400 |

BARRIER PROPERTIES FOR COATED PAPER

VALUE

TEST METHOD

| | | |
|--|------|---|
| WVTR @ 23 °C, 50% RH (g/m ² ·day·atm) | ≤ 2 | ASTM F1249-13 and F3299-18 |
| WVTR @ 38 °C, 90% RH (g/m ² ·day·atm) | ≤ 20 | ASTM F1249-13 and F3299-18 |
| Oil & grease barrier (KIT rating) | 12 | TAPPI T 559 pm-96 |
| Water absorption – COBB 60 (g/m ²) | ≤ 1 | ISO 535 |
| Water absorption – COBB 1800 (g/m ²) | ≤ 1 | ISO 535 |
| Sealability (N/15 mm) | > 4 | ASTM F88 |
| Recyclability on paper | ✓ | PTS-RH 021:2012 |
| | ✓ | CEPI recyclability laboratory test method Version 2 |



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HOW TO USE

- The coating formula suspension is ready to use as is. It is highly recommended not to dilute or modify it.
- Mix the suspension well before applying, to assure homogeneity and fluidity. An IBC mixer is recommended for IBCs.
- The product can be applied as a single layer or on top of OxyLay.
- It is recommended to apply a minimum dry coating weight of 5 g/m² on paper-based substrates.
- Sealing conditions should be optimized to achieve the optimal sealing strength. The recommended starting conditions are 140-200 °C, 4 bar pressure, 1 sec dwell time.
- The most suitable coating technologies include rod-coater, gravure, and spray.
- Reusing or storing the used material from the machine is not recommended.

STORAGE & SHELF LIFE

- VapLay exhibits good shelf-life stability of at least 12 months in an unopened container when stored correctly.
- Delivered in drums or IBC's.
- The product should be stored under frost-free conditions (> 5 °C) and at a temperature not exceeding 45 °C, away from direct sunlight.