

# ProVantage Kraftliner Aqua



## The ideal choice when special strength is needed

For high-humidity environments, hot temperatures and cold storage, ProVantage Kraftliner Aqua suits harsh conditions perfectly and gives rise to stable packaging solutions. Repetitive laboratory tests and several customer' reports confirm no leakage points for ProVantage Kraftliner Aqua for at least 3 days. Standard kraftliner has leakage points after a few hours.

### Laboratory comparison<sup>1</sup> of ProVantage Kraftliner Aqua and ProVantage Kraftliner

ProVantage Kraftliner Aqua	2 hours Cobb <sup>3</sup> g/m <sup>2</sup>	Leakage point <sup>4</sup>	Tensile stiffness <sup>3</sup> wet 2 hours kN/m		Burst strength <sup>3</sup> wet 2 hours kPa
			CD	MD	
170 g/m <sup>2</sup>	35% lower water absorption	approx. 3 days longer	38% higher stiffness	46% higher stiffness	119% higher burst
250 g/m <sup>2</sup>	14% lower water absorption	approx. 3 days longer	23% higher stiffness	same stiffness	70% higher burst

### ProVantage Kraftliner Aqua, absolute values<sup>1</sup> from laboratory testing

ProVantage Kraftliner Aqua	2 hours Cobb <sup>3</sup> g/m <sup>2</sup>	Leakage point <sup>4</sup>	Tensile stiffness <sup>3</sup> wet 2 hours kN/m		Burst strength <sup>3</sup> wet 2 hours kPa
			CD	MD	
170 g/m <sup>2</sup>	83	after 3 days	26.9	173.2	112.81
250 g/m <sup>2</sup>	118	after 3 days	38.3	277.2	193.34

ProVantage Kraftliner Aqua is a special and innovative paper grade that offers much higher resistance to water penetration than standard brown kraftliner. Once wet, the paper's strength properties decrease sharply, but to a lesser extent than those of standard kraftliner.

<sup>1</sup> Laboratory tests done by Mondi Świecie.

<sup>3</sup> Top side tested.

<sup>4</sup> A place, where water passes through the paper after time.

### Qualitative comparisons<sup>5</sup>

	ProVantage Kraftliner Aqua	Standard kraftliner	Paraffinated kraftliner
Water penetration (1)	★★★	★★	★★★
Productivity (2)	★★★	★★★	★★
Printability (3)	★★★	★★★	★★
Environment & safety (4)	★★★	★★★	★
Strength parameters after 2 hours Cobb from top side (5)	★★	★	NA
Strength parameters in dry conditions (6)	★★★	★★★	★★★
Substance optimisation in wet conditions (7)	★★★	★★	★★★
Friction & handling care (8)	★★	★★★	★★★

**Main end-uses:** Fruit & vegetable packaging, frozen fish packaging, cold chain packaging, high-humidity and extreme-climate storage, agricultural produce.

- (1) Water penetration: See laboratory tests; customers report similar performance from comparisons between paraffinated kraftliner and ProVantage Kraftliner Aqua.
- (2) Productivity: The omission of wax-dosing units on corrugators can increase converting speed by approx. 10 - 15%.
- (3) Printability: In view of its inherent characteristics, ProVantage Kraftliner Aqua may require different settings than standard kraftliner.
- (4) Environment & safety: Aqua paper grades are free of non-renewable petroleum, which improves the micro-environment at the corrugators and avoids additional risks (e.g. fire) at the corrugators. No undesirable migration of paraffin. As the paper surface is not treated, there is no risk of any impurities originating from the paper surface.
- (5) Strength parameters after 2 hours Cobb: See laboratory tests.
- (6) Strength parameters in dry conditions: No appreciable differences recorded.
- (7) Substance optimisation in wet conditions: The longer water penetration time shows that the strength parameters are maintained for a longer time. See also laboratory tests.
- (8) Friction & handling care: Lower friction attributable to surface treatment of the paper. This requires high reel handling care (maximum clamp pressure).

Please contact your local Mondi sales representative for specific references and additional information or check out further details online at: [www.mondigroup.com/aqua](http://www.mondigroup.com/aqua).

<sup>5</sup>Assessment done by Mondi

★ comparatively low results

★★ average results

★★★ comparatively good results

NA information not available

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