



Permeability and water vapour coefficient

Objective

This test is used to quantify the breathability of an upper material, by evaluating the quantity of water vapour that can potentially pass through it.

Principle

A sample of material taken from the upper is inserted like a plug in a bottle containing a hygroscopic product. This bottle is agitated continuously in an air conditioning flow. It is weighed at the start and end of the test. The only possible mass gain corresponds to the quantity of water vapour that has passed through the sample.

The result corresponds to the breathability in $\text{mg}/(\text{cm}^2.\text{h})$

Type: [Physical and mechanical test](#)

Standards: [EN ISO 20344 §6.6](#) / [EN ISO 20344 §6.8](#) / [EN ISO 20345 §5.4.6](#)

Product: [Footwear](#)

Criteria: [Mechanical risk](#) / [PEE](#)

Component: [Upper](#)



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