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Textiles - Physiological effects - Measurement of liquid sweat transport and buffering

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Textiles - Physiological effects - Measurement of liquid
sweat transport and buffering**

Textiles - Effets physiologiques - Mesurage du transfert
de sueur liquide et de l'effet tampon vis-à-vis de la
sueur liquide

Textilien - Physiologische Wirkungen - Messung des
flüssigen Schweißtransports und der flüssigen
Schweißpufferung

This European Standard was approved by CEN on 26 September 2022.

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EN 17534:2022 (E)

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European foreword

This document (EN 17534:2022) has been prepared by Technical Committee CEN/TC 248 “Textiles and textile products”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by May 2023.

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EN 17534:2022 (E)**Introduction**

For the assessment of the physiological properties of textiles worn next to the skin, not only their thermophysiological properties in stationary conditions (thermal and water vapour resistance) are important, which can be measured according to EN ISO 11092 with the sweating guarded-hotplate (Skin Model), but also their capacity to buffer in stationary sweat pulses and to transport liquid sweat, occurring in the practical use of textiles and clothing.

With liquid sweat appearing on the wearer's skin, the textiles take it up and transport it into the next textile layers or into the environmental air. This so-called buffering capacity and transport of liquid water (sweat) of a textile is measured quantitatively with the sweating guarded-hotplate, slightly modified from the design and procedures described in the above standard. A textile is judged to perform better, the more efficient the transport of sweat from the skin is, and the less liquid sweat remains on the skin.

1 Scope

This document specifies a test method for measuring liquid sweat management properties of knitted, woven and nonwoven textile fabrics, namely buffering index, sweat transport and sweat uptake.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696)*

EN ISO 11092, *Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test) (ISO 11092)*

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