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Textiles — Measurement of water vapour permeability of textiles for the purpose of quality control

Textiles — Mesurage de la perméabilité à la vapeur d'eau des textiles dans le but du contrôle qualité

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html

This document was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 2, *Cleansing, finishing and water resistance tests*.

This second edition cancels and replaces the first edition (ISO 15496:2004), which has been technically revised. It also incorporates the Technical Corrigendum ISO 15496:2004/Cor 1:2006.

The main changes compared to the previous eddition are as follows:

— in the scope, it has been clarified that there is some limitation in the use of this method as it relates to ISO 11092;

— editorial changes have been made throughout the document, including to some symbols;

— in footnote 1, the list of suppliers of the membrane has been removed.

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Textiles — Measurement of water vapour permeability of textiles for the purpose of quality control

1 Scope

This document describes a comparatively simple method for testing the water vapour permeability of textiles that will provide the manufacturer with a clearly recognized method for quality control within the plant.

The simple test method described in this document is not applicable for classifying the water vapour resistance of textiles against values relating to physiological effects specified in product standards, and particularly not those relating to personal protective equipment.

The method can be used for quality control but has some limitation in relation to ISO 11092, which gives a more comprehensive and relevant result for evaluation of water vapour penetration. Annex A provides further explanation of applicability.

This document cannot be used to compare results to other "dry dessicant" methods as they will not correlate. An explanation of the reasons can be found in Annex C.

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.

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
water vapour permeability
μ_{WV}
characteristic of a textile material describing the amount of water vapour diffusing through the textile per square metre, per hour and per unit difference of water vapour pressure across the textile

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