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Textiles — Determination of water absorption time and water absorption capacity of textile fabrics

Textiles — Détermination du temps d'absorption d'eau et de la capacité d'absorption d'eau des étoffes

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

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Textiles — Determination of water absorption time and water absorption capacity of textile fabrics

1 Scope

This document describes test methods for determining water absorption time and water absorption capacity of all textile fabrics designed to absorb water. Such fabrics are commonly used in products such as cloths and mops for cleaning tasks.

This method is especially applicable to fabrics such as waffle, chamois, bubble looped, checkered, terry looped, and multilayer textile materials.

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 139, *Textiles — Standard atmospheres for conditioning and testing*

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
absorption
tendency of a textile fabric to swallow and keep a liquid in the voids and pores of the materials

3.2
water absorption time
time required for textile fabric to become saturated with water under specified conditions

3.3
water absorption capacity
mass of water that is absorbed by a textile fabric when it is saturated with water under specified conditions

4 Principle

A fabric specimen is placed as flat as possible on the water surface under specified conditions, and the time required for complete wetting of the specimen is measured. To measure the water absorption capacity, a weighed fabric specimen is immersed in the water and, after a given time to make the specimen saturated, the specimen is removed, drained and reweighed.

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