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Tissue paper and tissue products —

Part 5: Determination of wet tensile strength

Papier tissue et produits tissue —

Partie 5: Détermination de la résistance à la rupture par traction à l'état humide

Reference number
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Foreword

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This document was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 2, *Test methods and quality specifications for paper and board,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 172, *Pulp, paper and board,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 12625-5:2016), which has been technically revised.

The main changes are as follows:

— updated force measurement requirements (in 5.1.1 and 5.2.1);

— added clarification to 7.2.1 (“accelerated” and “rapid” have the same meaning in this document).

A list of all parts in the ISO 12625 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Tissue paper and tissue products —

Part 5:
Determination of wet tensile strength

1 Scope

This document specifies a test method for the determination of the wet tensile strength of tissue paper and tissue products after soaking with water, using a tensile-strength-testing apparatus operating with a constant rate of elongation.

Currently, two types of tensile-strength-testing apparatus are commercially available, one where the test piece is positioned vertically and, for the other, horizontally. This document applies for both. For vertical tensile-strength-testing apparatus, a device that is held in the lower grip of the tensile-strength-testing apparatus, called a Finch Cup, is used to achieve the wetting. For horizontal tensile-strength-testing apparatus, the soaking device is placed between the two clamps.

This document is not applicable to cases where impurities and contraries are determined.

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 186, *Paper and board — Sampling to determine average quality*

ISO 187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples*

ISO 1924-2, *Paper and board — Determination of tensile properties — Part 2: Constant rate of elongation method (20 mm/min)*

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

ISO 12625-1, *Tissue paper and tissue products — Part 1: Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12625-1 and the following apply.

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

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

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

3.1
wet tensile strength
maximum tensile force per unit width that a test piece soaked with water will withstand before breaking

Note 1 to entry: The wet tensile strength is expressed in newtons per metre (N/m).

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