

Leather - Physical and mechanical tests -
Determination of water vapour permeability (ISO
14268:2023)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 14268:2023 sisaldab Euroopa standardi EN ISO 14268:2023 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 14268:2023 consists of the English text of the European standard EN ISO 14268:2023.
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English Version

Leather - Physical and mechanical tests - Determination of
water vapour permeability (ISO 14268:2023)

Cuir - Essais physiques et mécaniques - Détermination
de la perméabilité à la vapeur d'eau (ISO 14268:2023)

Leder - Physikalische und mechanische Prüfungen -
Bestimmung der Wasserdampfdurchlässigkeit (ISO
14268:2023)

This European Standard was approved by CEN on 10 February 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 14268:2023) has been prepared by Technical Committee IULTCS "International Union of Leather Technologists and Chemists Societies" in collaboration with Technical Committee CEN/TC 289 "Leather" the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 14268:2012.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 14268:2023 has been approved by CEN as EN ISO 14268:2023 without any modification.

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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

IULTCS, originally formed in 1897, is a world-wide organization of professional leather societies to further the advancement of leather science and technology. IULTCS has three Commissions, which are responsible for establishing international methods for the sampling and testing of leather. ISO recognizes IULTCS as an international standardizing body for the preparation of test methods for leather.

This document was prepared by the Physical Tests Commission of the International Union of Leather Technologists and Chemists Societies (IUP Commission, IULTCS), in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 289, *Leather*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 14268:2012), which has been technically revised.

The main changes are as follows:

- Introduction added;
- new [Clause 3](#), Terms and definitions, added;
- new [Clause 8](#) added for the new Procedure B – Accelerated test method.

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Introduction

This document describes two methods (Procedure A and Procedure B) for water vapour permeability determination:

- The method in accordance with Procedure A is the standard test method for water vapour permeability determination and is used in any case of discrepancy or dispute.
- The method in accordance with Procedure B is equivalent to the method described in ISO 20344 and can be applied for an accelerated routine control in production processes and/or if requested by the client.

Leather — Physical and mechanical tests — Determination of water vapour permeability

1 Scope

This document describes a method for determining the water vapour permeability of leather and provides alternative methods of sample preparation and for the measurement procedure.

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 2418, *Leather — Chemical, physical and mechanical and fastness tests — Sampling location*

ISO 2419, *Leather — Physical and mechanical tests — Sample preparation and conditioning*

ISO 2589, *Leather — Physical and mechanical tests — Determination of thickness*

ISO 5402-1, *Leather — Determination of flex resistance — Part 1: Flexometer method*

3 Terms and definitions

No terms and definitions are listed in this document.

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/>

4 Principle

The test piece is clamped over the opening of a container which contains a solid desiccant and is placed in a strong current of air in a standard atmosphere. The air inside the container is constantly agitated by the desiccant, which is kept in motion by the rotation of the container. The container is weighed at the start and the end of the test and the mass of moisture which has been absorbed by the desiccant is determined from the difference.

5 Apparatus

The usual laboratory apparatus and, in particular, the following shall be used.

5.1 Containers, in the form of jars or bottles, with a neck of internal diameter $30\text{ mm} \pm 3\text{ mm}$ fitted with a screw top with a circular opening whose diameter is equal to the internal diameter of the neck. Suitable containers typically have a height range of 70 mm to 90 mm.

5.2 Test machine, see [Annex A](#) for sources of a suitable apparatus, including the following:

5.2.1 Vertically mounted turntable, rotating at $(75 \pm 5)\text{ r/min}$, capable of holding containers ([5.1](#)) with their axis parallel to and $(67 \pm 2)\text{ mm}$ from the axis of rotation of the turntable.