

Leather - Physical and mechanical tests - Determination  
of extension set (ISO 17236:2016)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 17236:2016 sisaldab Euroopa standardi EN ISO 17236:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 17236:2016 consists of the English text of the European standard EN ISO 17236:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.03.2016.	Date of Availability of the European standard is 09.03.2016.
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ICS 59.140.30

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English Version

## Leather - Physical and mechanical tests - Determination of extension set (ISO 17236:2016)

Cuir - Essais physiques et mécaniques - Détermination de la déformabilité (ISO 17236:2016)

Leder - Physikalische und mechanische Prüfungen - Bestimmung der bleibenden Dehnung (ISO 17236:2016)

This European Standard was approved by CEN on 23 January 2016.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

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## European foreword

This document (EN ISO 17236:2016) 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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

This document supersedes EN ISO 17236:2002.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 17236:2016 has been approved by CEN as EN ISO 17236:2016 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](http://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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

ISO 17236 was prepared by the Physical Test 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*, the secretariat of which is held by UNI, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

It is based on IUP 43 which was published in *J. Soc. Leather Tech. Chem.* **84**, p. 399, (2000) and confirmed as an official method of the IULTCS in March 2001.

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 second edition cancels and replaces the first edition (ISO 17236:2002), of which it constitutes a minor revision to align item d) of Clause 8 with ISO 2419:2012.

# Leather — Physical and mechanical tests — Determination of extension set

## 1 Scope

This International Standard specifies a method for determining the extension set of leather. It is intended for use on upholstery leather but is applicable to all flexible leathers.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

## 3 Principle

A test piece is repeatedly extended at a specified rate until the forces reach a predetermined level and the permanent extension is calculated as a percentage of the original length.

## 4 Apparatus

**4.1 Tensile testing machine**, having a force range appropriate to the specimen under test and consisting of a means of recording the force (4.1.1) and jaws that operate at a uniform speed of separation of  $50 \text{ mm} \pm 5 \text{ mm/min}$ .

**4.1.1 Means of recording the force**, to an accuracy as specified by Class 2 of ISO 7500-1.

**4.1.2 Jaws**, minimum length 30 mm in the direction of the applied load, designed to apply constant clamping by mechanical or pneumatic means. The texture and design of the inside faces of the jaws shall be such that at the maximum load attained in the test, the test piece does not slip at either jaw.

**4.2 Thickness gauge**, as specified in ISO 2589.

**4.3 Press knife**, the inner wall of which is a rectangle  $250 \text{ mm} \pm 5 \text{ mm} \times 10,0 \text{ mm} \pm 0,5 \text{ mm}$ , conforming to the requirements of ISO 2419.

**4.4 Ruler**, reading to 0,5 mm.

**4.5 Stopwatch**, reading to 1 s.