

Leather - Physical and mechanical tests - Determination of thickness (ISO 2589:2016)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 2589:2016 sisaldab Euroopa standardi EN ISO 2589:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 2589:2016 consists of the English text of the European standard EN ISO 2589:2016.
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 16.03.2016.	Date of Availability of the European standard is 16.03.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 59.140.30

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Aru 10, 10317 Tallinn, Eesti; koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Leather - Physical and mechanical tests - Determination of thickness (ISO 2589:2016)

Cuir - Essais physiques et mécaniques - Détermination de l'épaisseur (ISO 2589:2016)

Leder - Physikalische und mechanische Prüfungen - Bestimmung der Dicke (ISO 2589:2016)

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

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European Foreword

This document (EN ISO 2589:2016) 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 2589:2002.

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 2589:2016 has been approved by CEN as EN ISO 2589:2016 without any modification.

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Principle	1
4	Apparatus	1
5	Sampling and sample preparation	2
6	Procedure	2
7	Expression of results	2
8	Test report	2

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 2589 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 4 originally published in *J. Soc. Leather Trades Chemists* **42**, p. 387, (1958) and declared an official method of the IULTCS in 1959. An updated version was published in *J. Soc. Leather Tech. Chem.* **82**, p. 225, (1998) and a further revision published in *J. Soc. Leather Tech. Chem.* **84**, p. 311, (2000) and reconfirmed as an official method in March 2001. This latest revision now includes the number of test measurements to be taken.

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 third edition cancels and replaces the second edition (ISO 2589:2002), of which it constitutes a minor revision to align item c) of Clause 8 with ISO 2419:2012.

Leather — Physical and mechanical tests — Determination of thickness

1 Scope

This International Standard specifies a method for determining the thickness of leather. The method is applicable to all types of leather of any tannage. The measurement is valid for both the whole leather and a test sample.

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*

3 Principle

The leather is placed in a gauge under a specified load for a specified time and the thickness read directly.

4 Apparatus

4.1 Test machine, including the following:

4.1.1 Gauge, graduated to read to 0,01 mm directly with an accuracy of $\pm 0,02$ mm over the whole scale length.

4.1.2 Anvil, comprising the flat horizontal surface of a cylinder of diameter $10,00 \text{ mm} \pm 0,05 \text{ mm}$ projecting $3,0 \text{ mm} \pm 0,1 \text{ mm}$ above the surface of a concentric flat circular platform of diameter $50,0 \text{ mm} \pm 0,2 \text{ mm}$.

NOTE The circular platform of 50 mm diameter helps to support medium weight leathers which otherwise presents a convex surface to the presser foot. The anvil is raised 3 mm above the platform so that errors are avoided in measurements on heavy leathers which are not flat.

4.1.3 Presser foot, having a flat circular surface of diameter $10,0 \text{ mm} \pm 0,05 \text{ mm}$, coaxial with the anvil and capable of movement normal to the face of the anvil. The contacting surfaces of the anvil and presser foot shall be dead weight loaded with $393 \text{ g} \pm 10 \text{ g}$. Movements of the presser foot shall give a direct reading of the movement on the gauge (4.1.1).

NOTE The loads and dimensions quoted in 4.1.3 give a pressure of 49,1 kPa (500 g/cm^2).

4.1.4 Rigid stand, to hold the gauge (4.1.1), anvil (4.1.2) and presser foot (4.1.3).