Leather - Physical and mechanical tests - Determination of bending force (ISO 14087:2022)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 14087:2022 sisaldab Euroopa standardi EN ISO 14087:2022 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 14087:2022 consists of the English text of the European standard EN ISO 14087:2022.

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 and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.10.2022.

Date of Availability of the European standard is 19.10.2022.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 59.140.30

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EUROPEAN STANDARD

NORME EUROPÉENNE

EN ISO 14087

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English Version

Leather - Physical and mechanical tests - Determination of bending force (ISO 14087:2022)

Cuir - Essais physiques et mécaniques - Détermination de la force de flexion (ISO 14087:2022)

Leder - Physikalische und mechanische Prüfungen -Bestimmung der Biegekraft (ISO 14087:2022)

This European Standard was approved by CEN on 7 April 2022.

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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 14087:2022) 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.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 14087:2011.

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 14087:2022 has been approved by CEN as EN ISO 14087:2022 without any modification.

Con	ntents	Page
Fore	eword	iv
1	Scope	
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Apparatus	2
6	Sampling and sample preparation	5
7	Test procedure	5
8	Test report	
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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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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*, the secretariat of which is held by UNI, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 14087:2011), which has been technically revised.

The main changes are as follows:

- <u>5.1.1</u>, <u>5.1.2</u> and <u>5.1.3</u> have been revised to improve the clarity of the clamping device and its dimensions;
- Figures 1 and 2 have been revised;
- a new <u>Figure 3</u> has been included;
- Clauses 6 and 7.1 have been revised to give a better understanding;
- Clause 8 has been revised and rearranged.

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.

Leather — Physical and mechanical tests — Determination of bending force

1 Scope

This document specifies a test method for the determination of the bending force of leather.

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 7500-1:2018, Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

bending force

force exerted by the specimen on the measuring bar at a specified *bending angle* (3.2), *bending length* (3.3) and *bending rate* (3.4)

3.2

bending angle

angle at which the bending force (3.1) is measured

3.3

bending length

length around which the specimen is bent

Note 1 to entry: The bending length is the distance between the clamping device of the specimen and the bar onto which the force of the specimen is transferred.

3.4

bending rate

rate of bending of the specimen

Note 1 to entry: The bending rate is expressed in degrees per second (°/s).