INTERNATIONAL STANDARD

ISO 17130

IULTCS IUP 55

Second edition
2021-02

Leather — Physical and mechanical tests — Determination of dimensional change

Cuir — Essais physiques et mécaniques — Détermination des variations dimensionnelles

iTeh Standards
(https://standards.iteh.ai)
Document Preview

ISO 17130:2021
https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-4ba6-8e3b-10d8ed101613/iso-17130-2021

Reference numbers
ISO 17130:2021(E)
IULTCS/IUP 55:2021(E)

© ISO 2021

iTeh Standards
(https://standards.iteh.ai)
Document Preview

ISO 17130:2021
https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-4ba6-8e3b-10d8ed101613/iso-17130-2021

COPYRIGHT PROTECTED DOCUMENT

© ISO 2021
All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

iTeh Standards
(https://standards.iteh.ai)
Document Preview

ISO 17130:2021
https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-4ba6-8e3b-10d8ed101613/iso-17130-2021

© ISO 2021 – All rights reserved

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 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.

iTeh Standards
(https://standards.iteh.ai)
Document Preview
ISO 17130:2021
https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-4ba6-8e3b-10d8ed101613/iso-17130-2021

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).

IULTCS, originally formed in 1897, is a worldwide 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 17130:2013), which has been technically revised.

The main changes compared to the previous edition are as follows:

— a new Clause 3 has been added;

— 5.4 and 5.6 have been revised to allow an additional support and an additional marking technique, respectively;

— 6.1 and 6.2 have been revised to give a better understanding;

— 7.2, 7.3, 7.4 and 7.5 have been revised; in 7.5 the conditioning time has been reduced to 24 h;

— a new Clause 9 c) requires the sample size to be reported.

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.

© ISO 2021 – All rights reserved

Leather — Physical and mechanical tests — Determination of dimensional change

1 Scope

This document specifies a method of determining the dimensional change (shrinkage) of leathers caused by ageing. It is applicable to all leathers.

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 105-B06, *Textiles — Tests for colour fastness — Part B06: Colour fastness and ageing to artificial light at high temperatures: Xenon arc fading lamp test*

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

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

ISO 17228:2015, *Leather — Tests for colour fastness — Change in colour with accelerated ageing*

iTeh Standards
(https://standards.iteh.ai)
Document Preview

3 Terms and definitions

No terms and definitions are listed in this document.

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

https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-4ba6-8e3b-10d8ed101613/iso-17130-2021

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

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

4 Principle

A conditioned test piece is aged using the conditions defined in ISO 17228. The shrinkage is determined after reconditioning.

5 Apparatus and materials

5.1 Oven, as specified in ISO 17228.

5.2 Climate chamber, as specified in ISO 17228.

5.3 Vernier calliper, reading to 0,1 mm.

5.4 Support, glass plate or suitable stainless-steel mesh, that keeps the test piece flat. Support shall be covered with a polyester nonwoven fabric, as specified in ISO 105-B06, to prevent the test piece from sticking.

5.5 Press knife, square, as specified in ISO 2419, with inner walls measuring 150 mm ± 1 mm.

© ISO 2021 – All rights reserved

5.6 Indelible marker or needle with a diameter less than or equal to 1 mm.

6 Sampling and sample preparation

6.1 Sample in accordance with ISO 2418. Cut at least two test pieces (150 × 150) mm for each of the ageing conditions required, by applying the press knife (5.5) to the grain surface, if distinguishable.

For some applications, it can be necessary to use larger test pieces, for example (300 × 300) mm to enhance the accuracy, especially in the case of low shrinkage.

6.2 Using an indelible marker or needle (5.6), mark four measurement reference points, A, B, C and D, on the test pieces such that they form a square having sides of (100 ± 1) mm as shown in Figure 1.

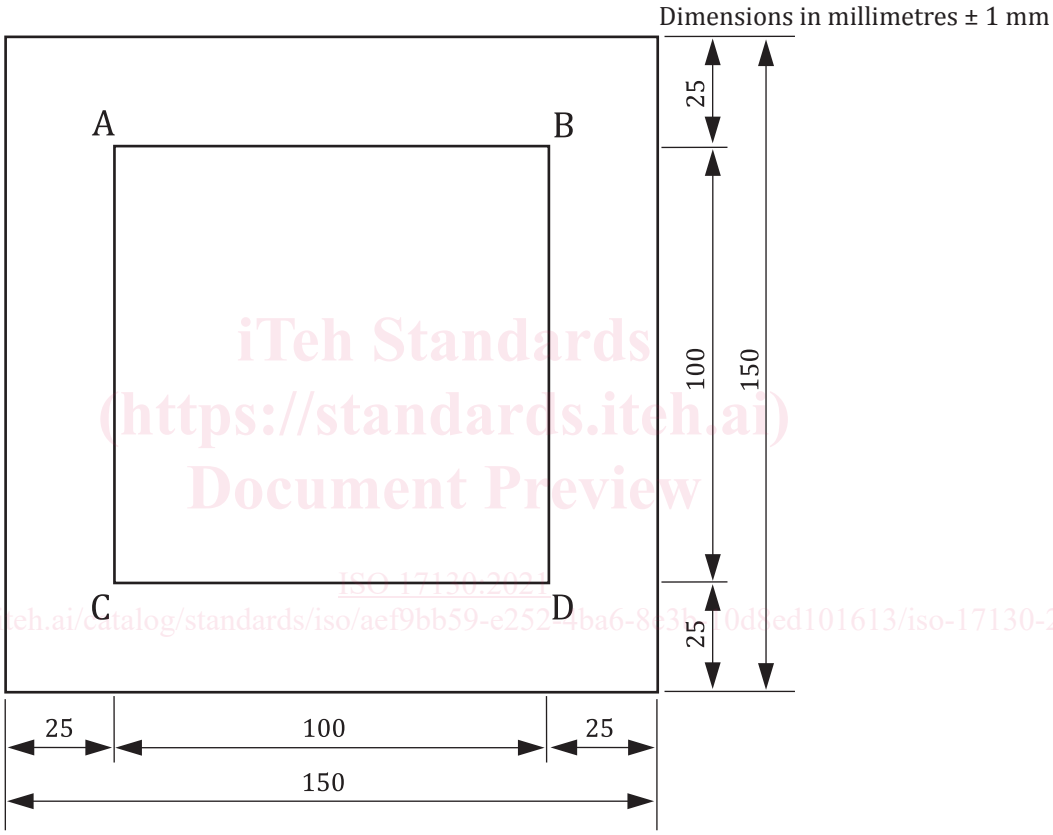

Figure 1 — Location of measurement reference points on a test piece

If test pieces with another dimension, for example (300 × 300) mm, are used, the measurement points should be marked at a distance of (25 ± 1) mm from each edge.

6.3 Condition the test pieces in accordance with ISO 2419 for at least 48 h.

7 Procedure

7.1 Measure the distances AB, CD, AC and BD on each test piece using the Vernier calliper (5.3).

7.2 Preheat the oven (5.1) to the test temperature or adjust the climate chamber (5.2) to the starting conditions. Place the test pieces with the grain side, top side or coated side downward on the support (5.4) in the centre of the oven or climate chamber.

iTeh Standards
(https://standards.iteh.ai)
Document Preview
ISO 17130:2021
https://standards.iteh.ai/catalog/standards/iso/aef9bb59-e252-ba6-8e3b-10d8ed101613/iso-17130-2021

© ISO 2021 – All rights reserved