Leather - Determination of distension and strength of surface (Ball burst method) (ISO 3379:2015)



#### EESTI STANDARDI EESSÕNA

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#### ICS 59.140.30

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## EUROPEAN STANDARD NORME EUROPÉENNE

### **EN ISO 3379**

EUROPÄISCHE NORM

September 2015

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#### **English Version**

# Leather - Determination of distension and strength of surface (Ball burst method) (ISO 3379:2015)

Cuir - Détermination de l'extension et de la résistance à la traction de la surface (méthode de la bille) (ISO 3379:2015)

Leder - Bestimmung der Narbendehnfähigkeit und bruchkraft (Lastometer-Methode) (ISO 3379:2015)

This European Standard was approved by CEN on 8 August 2015.

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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 3379:2015) has been prepared by Technical Committee CEN/TC 289 "Leather", the secretariat of which is held by UNI, in collaboration with Technical Committee IULTCS "International Union of Leather Technologists and Chemists Societies".

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of an identical text or by endorsement, at the latest by March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.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.

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#### **Endorsement notice**

The text of ISO 3379:2015 has been approved by CEN as EN ISO 3379:2015 without any modification.

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#### Foreword

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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 (<a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 3379 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).

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 3379:1976), which has been technically revised.

# Leather — Determination of distension and strength of surface (Ball burst method)

#### 1 Scope

This International Standard specifies a test method for the determination of distension and strength of the leather grain or finished surface. This method is applicable to all flexible leathers and it is particularly suitable to determine the lastability of leathers for footwear uppers.

#### 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

#### 3 Terms and definitions

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

#### 3.1

#### wearing surface

exposed or visible face of the leather when used in its intended application

Note 1 to entry: The wearing surface is usually the grain side of leather, however, the wearing surface of some leathers may be otherwise dressed or finished, e.g. patent leather.

#### 3.2

#### reverse side

opposite side to the wearing surface

Note 1 to entry: The reverse side is usually the flesh side of leather.

#### 3.3

#### cracking

small surface splits or tears less than approximately 0,5 mm

#### 3.4

#### bursting

complete rupture of the full thickness of the test piece

#### 4 Principle

A circular test piece is clamped around its edge and is gradually distended by forcing a steel metal ball, attached to the end of a plunger, against the centre of the test piece on the reverse side. At certain distension, measured in terms of distance travelled by the plunger, cracks appear on the wearing surface of the test piece or it sustains other permanent physical damage; this distension is recorded as the cracking point or first damage. At a higher distension, the material usually bursts and this distension may also be recorded.