



**SLOVENSKI STANDARD**  
**SIST EN ISO 17228:2006**

**01-september-2006**

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**Usnje – Preskušanje obstojnosti barve – Sprememba barve pri preskusu pospešenega staranja (ISO 17228:2005)**

Leather - Tests for colour fastness - Change in colour with accelerated ageing (ISO 17228:2005)

Leder - Farbechtheitsprüfungen - Farbänderung durch beschleunigtes Altern (ISO 17228:2005)

Cuir - Essais de solidité des teintures - Changement de couleur avec vieillissement accéléré (ISO 17228:2005)

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**Ta slovenski standard je istoveten z: EN ISO 17228:2006**

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**ICS:**

59.140.30 Usnje in krzno

Leather and furs

**SIST EN ISO 17228:2006**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 17228**

June 2006

ICS 59.140.30

English Version

**Leather - Tests for colour fastness - Change in colour with  
accelerated ageing (ISO 17228:2005)**

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beschleunigtes Altern (ISO 17228:2005)

This European Standard was approved by CEN on 19 May 2006.

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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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

**EN ISO 17228:2006 (E)****Foreword**

The text of ISO 17228:2005 has been prepared by the Fastness Tests Commission of the International Union of Leather Technologists Chemists Societies (IUF Commission, IULTCS). It is based on Method IUF 412 of the International Union of Leather Technologists and Chemists Societies and has been taken over as EN ISO 17228:2006 by 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 December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

**Endorsement notice**  
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The text of ISO 17228:2005 has been approved by CEN as EN ISO 17228:2006 without any modifications.

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ISO  
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412

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2005-07-15

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**Leather — Tests for colour fastness —  
Change in colour with accelerated ageing**

*Cuir — Essais de solidité des teintures — Changement de couleur avec  
vieillissement accéléré*

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 17228 was prepared by the Fastness Tests Commission of the International Union of Leather Technologists and Chemists Societies (IUF Commission, IULTCS). It is based on IUF 412 published in *J. Soc. Leather Tech. Chem.*, **86**, pp. 325-331, 2002, and declared an official method of the IULTCS in May 2003.

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.

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# Leather — Tests for colour fastness — Change in colour with accelerated ageing

## 1 Scope

Over time, the surface colour of leather and the leather itself change due to ageing and to the action of the surroundings on the leather. The purpose of the various ageing procedures described in this International Standard is to obtain an indication of the changes that could occur when leather is exposed to a certain environment for a prolonged time. The test conditions to be used depend on the type of leather and its intended use.

## 2 Normative references

The following referenced documents are indispensable for the application 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-A01, *Textiles — Tests for colour fastness — Part A01: General principles of testing*

ISO 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

ISO 105-A03, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining*

ISO 105-A04, *Textiles — Tests for colour fastness — Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics*

ISO 105-A05, *Textiles — Tests for colour fastness — Part A05: Instrumental assessment of change in colour for determination of grey scale rating*

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

A test specimen of leather is exposed to at least one of the three following conditions:

- heat (Clause 6);
- heat and humidity (Clause 7);
- cycles of different temperature and humidity (Clause 8).

One or more of these procedures may take place simultaneously. The change in colour of the specimen is assessed with the standard grey scale and, if applicable, any changes in the finish or appearance are noted.

These procedures can be used to prepare the leather specimen for other physical or fastness tests after accelerated ageing.

NOTE Accelerated-ageing tests are for guidance only and they may not necessarily be representative of long-term use at ambient temperatures.