



**SLOVENSKI STANDARD**  
**SIST EN ISO 11644:2004**  
**01-maj-2004**

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**Usnje – Preskus vezave dodelavnih nanosov (ISO 11644:1993)**

Leather - Test for adhesion of finish (ISO 11644:1993)

Leder - Prüfung der Haftfestigkeit von Zurichtungen (ISO 11644:1993)

Cuir - Essai de l'adhésion du finissage (ISO 11644:1993)

**Ta slovenski standard je istoveten z: EN ISO 11644:2003**

[SIST EN ISO 11644:2004](https://standards.iteh.ai/catalog/standards/sist/11a11563-7d2b-4517-bef8-066429de1178/sist-en-iso-11644-2004)

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**ICS:**

59.140.30      Usnje in krzno      Leather and furs

**SIST EN ISO 11644:2004**      **en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 11644**

July 2003

ICS 59.140.30

English version

## Leather - Test for adhesion of finish (ISO 11644:1993)

Cuir - Essai de l'adhésion du finissage (ISO 11644:1993)

Leder - Prüfung der Haftfestigkeit von Zurichtungen (ISO 11644:1993)

This European Standard was approved by CEN on 10 July 2003.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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 11644:2003 (E)

<b>CORRECTED 2003-09-24</b>
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## Foreword

This document (EN ISO 11644:2003) has been prepared by Technical Committee CEN/TC 289 "Leather", the secretariat of which is held by UNI, in collaboration with the International Union of Leather Technologists and Chemists Societies (IULTCS).

It is based on Method IUF 470 of the 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 January 2004, and conflicting national standards shall be withdrawn at the latest by January 2004.

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

## iTeh STANDARD PREVIEW

Endorsement notice

The text of ISO 11644:1993 has been approved by CEN as EN ISO 11644:2003 without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

## Annex ZA (normative)

### Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 105-A02	1993	Textiles - Tests for colour fastness - Part A02: Grey scale for assessing change in colour	EN 20105-A02	1994
ISO 2418	2002	Leather - Chemical, physical and mechanical and fastness tests - Sampling location	EN ISO 2418	2002
ISO 2419	2002	Leather - Physical and mechanical tests - Sample preparation and conditioning	EN ISO 2419	2002
ISO 3696	1987	Water for analytical laboratory use - Specification and test methods	EN ISO 3696	1995

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INTERNATIONAL  
STANDARD

**ISO**  
**11644**

**IULTCS/IUF**  
**470**

First edition  
1993-12-15

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**Leather — Test for adhesion of finish**

*Cuir — Essai de l'adhésion du finissage*

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Reference number  
ISO 11644:1993 (E)  
IULTCS/IUF  
470, 1993 Edition

**ISO 11644:1993(E)****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.

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.

International Standard ISO 11644 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 470 published in *J. Soc. Leather Tech. Chem.*, **74**, pp.155-160 (1990), and declared an official method of the IULTCS in September 1991.

Annexes A and B of this International Standard are for information only.

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## Introduction

A test method similar to that specified in this International Standard, using an epoxy adhesive and metal adherend-plates has been in use in the leather trade for many years, but has never been declared an official method by IULTCS or ISO. The adhesive frequently penetrates thin finish films, thus increasing the adhesion value unrealistically, and it is usually not possible to measure wet adhesion, as there is insufficient adhesion to the metal when water is present. Finishes with insufficient adhesion to the adhesive also occur quite frequently. In spite of these drawbacks, this old method has been used regularly and is referred to in many specifications. The new method specified in this International Standard eliminates most of these drawbacks.

The polyurethane adhesive used in the new method contains no solvent at the time of application to the finish and thus has a very high viscosity. It also stays viscous for only a few seconds, and there is no time for it to penetrate even very thin finishes, unless the finish has open cracks in it. While adhesion to most finishes is sufficient, a few cases exist in which adhesion is insufficient, and a different adhesive has to be used in such cases. As the adhesive does not penetrate, it is quite possible to test different layers of a multi-layer finish separately. Such a finish can be tested several times until all the layers have been removed from the leather. It would be advisable for specifications to make allowance for this fact.

A strip of hard PVC is used as the adherend-plate, this giving good adhesion under wet conditions. Wet adhesion can therefore be measured easily. Experience has shown that this "real" wet-adhesion value is often lower, a fact that should also be considered when drawing up specifications based on the new method.