Leather - Physical and mechanical tests - Determination of surface coating thickness (ISO 17186:2011)

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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 17186:2011 sisaldab Euroopa standardi EN ISO 17186:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 17186:2011 consists of the English text of the European standard EN ISO 17186:2011.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.12.2011.	Date of Availability of the European standard is 15.12.2011.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Leather - Physical and mechanical tests - Determination of surface coating thickness (ISO 17186:2011)

Cuir - Essais physiques et mécaniques - Détermination de l'épaisseur du revêtement de surface (ISO 17186:2011)

Leder - Physikalische und mechanische Prüfungen - Bestimmung der Dicke der Oberflächendeckschicht (ISO 17186:2011)

This European Standard was approved by CEN on 14 December 2011.

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Foreword

This document (EN ISO 17186:2011) has been prepared by Technical Committee CEN/TC 289 “Leather", the secretariat of which is held by UNI, in collaboration with 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of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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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Leather — Physical and mechanical tests — Determination of surface coating thickness

1 Scope

This International Standard specifies a method for determining the thickness of the surface coating applied to leather when measured under zero compression. It is applicable to all types of leather.

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 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 section of leather is taken perpendicular to the coated surface. The thickness of the surface coating is measured using a microscope and expressed both as a thickness and as a percentage of the total thickness.

4 Apparatus

4.1 Light microscope or scanning electron microscope, which can be operated with an object-field size of 1 mm × 1 mm, or lower, and is

— fitted with a camera-image unit connected to a computer (resolution of at least 500 × 500 pixels), or

— fitted with a photographical unit, or

— equipped with an eyepiece with a graduated scale (at least 100 scale marks).

NOTE 100 scale marks correspond to a scaling of 10 µm in the object-field dimension for an object-field size of 1 mm × 1 mm.

For measurement of coating thicknesses of less than 50 µm, an object-field size of 0,4 mm × 0,4 mm or lower has to be used. For measurement of values of less than 15 µm, a scanning electron microscope with a suitable object-field dimension should be used.

4.2 Razor blade.

4.3 Grid or **similar calibration device**, reading to at least 10 µm and suitable for use in the light microscope or scanning electron microscope.

4.4 Coating unit, using sputter or evaporation, including a suitable element or alloy (e.g. gold) for coating, if a scanning electron microscope is used.

4.5 Specimen stubs, suitable for a scanning electron microscope.