

**Leather - Identification of leather with microscopy (ISO 17131:2012)**

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English Version

## Leather - Identification of leather with microscopy (ISO 17131:2012)

Cuir - Identification du cuir par microscopie (ISO 17131:2012)

Leder - Identifikation von Leder mittels Mikroskopie (ISO 17131:2012)

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## Foreword

This document (EN ISO 17131:2012) 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.

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of an identical text or by endorsement, at the latest by February 2013, and conflicting national standards shall be withdrawn at the latest by February 2013.

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## Introduction

The identification of leather is best made by operators experienced in material identification using microscopy, which is the preferred method. With other methods, such as chemical analysis, it can be difficult to absolutely determine that the material is leather.

# Leather — Identification of leather with microscopy

## 1 Scope

This International Standard specifies a method using microscopy to identify leather and distinguish it from other materials. The method is not applicable for identifying specific leathers (e.g. sheep 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.

EN 15987, *Leather — Terminology — Key definitions for the leather trade*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15987 apply.

## 4 Principle

A cross-section of the material is cut perpendicular to the surface. The material structure is compared with typical pictures or known samples by means of microscopy.

The method should be carried out by operators experienced in material identification by microscopy.

## 5 Apparatus and materials

**5.1 Light microscope or scanning electron microscope**, capable of giving a normal magnification of at least 20×.

NOTE For some materials it is necessary to use a microscope with a magnification of 500×.

**5.2 Razor blade**, capable of cutting a clean cross-section in leather.

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

**5.4 Specimen stubs**, suitable for a scanning electron microscope, if used.

**5.5 Reference materials**, with known designation.