

Leather — Chemical tests — Preparation of chemical test samples

ICS 59.140.30

National foreword

This British Standard is the UK implementation of EN ISO 4044:2008. It supersedes BS EN ISO 4044:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TCI/69, Footwear, leather and coated fabrics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 May 2008

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ISBN 978 0 580 57416 0

Amendments/corrigenda issued since publication

Date	Comments

English Version

**Leather - Chemical tests - Preparation of chemical test samples
(ISO 4044:2008)**

Cuir - Essais chimiques - Préparation des échantillons pour
essais chimiques (ISO 4044:2008)

Leder - Chemische Prüfungen - Vorbereitung von Proben
für chemische Untersuchungen (ISO 4044:2008)

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

Foreword

This document (EN ISO 4044:2008) has been prepared by Technical Committee CEN/TC 289 "Leather", the secretariat of which is held by UNI in collaboration with Technical Committee ISO/TC 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of an identical text or by endorsement, at the latest by August 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

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Foreword

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ISO 4044/IUC 3 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 289, *Leather*, in collaboration with the Chemical Tests Commission of the International Union of Leather Technologists and Chemists Societies (IUC Commission, IULTCS), in accordance with the Agreement on technical co-operation between ISO and CEN (Vienna Agreement). It is based on IUC 3 originally published in *J. Soc. Leather Trades Chemists*, **49**, pp. 8-10, 1965, and declared an official method of the IULTCS in 1965.

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 sampling and the 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 4044:1977), which has been technically revised.

Leather — Chemical tests — Preparation of chemical test samples

1 Scope

This International Standard specifies a method for the preparation of a test sample of leather for chemical analysis. This method 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 2419, *Leather — Physical and mechanical tests — Sample preparation and conditioning*

3 Principle

Leather is ground in a cutter mill to form “ground leather” or “leather powder”.

4 Apparatus

4.1 Cutter mill, having a blade rotational frequency of 700 to 1 000 revolutions per minute and a perforated sieving plate with 4 mm (\pm 0,5 mm) diameter perforations. The mill blades shall be sharp.

5 Preparation of the test sample

Before grinding, the samples of leather should be reduced to small pieces. The precise size of the small pieces is not detailed here as they will be defined by the design of the cutter mill feed system.

Ensure that the cutter mill and sample collecting device are clean.

Water should not be used for cleaning.

If sufficient sample is available, then a few small pieces of test leather should be ground and discarded, with the apparatus being cleaned again before proceeding with grinding the main test sample.

Test pieces that are wet (in excess of 30 % moisture) should be pre-dried at a temperature not exceeding 50 °C. The drying temperature should be selected with consideration of the influence of elevated temperature on the nature of the analyte.

If the samples are dried at elevated temperature, they shall be conditioned according to ISO 2419.

6 Storage of the test sample

The ground test sample shall be mixed thoroughly and placed in a clean, dry, airtight container. The container shall be kept away from localized sources of heat.

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