

BS EN 13336:2012



BSI Standards Publication

Leather — Upholstery leather characteristics — Guide for selection of leather for furniture

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National foreword

This British Standard is the UK implementation of EN 13336:2012. It supersedes BS EN 13336:2004 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TC1/69, 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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In particular, attention is drawn to:

Statutory Instrument 1988 No. 1324, The Furniture and Furnishings (Fire) (Safety) Regulations 1988;

Statutory Instrument 1989 No. 2358, The Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1989;

Statutory Instrument 1993 No. 207, The Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 1993; and

Statutory Instrument 2010 No. 2205, The Furniture and Furnishings (Fire) (Safety) (Amendment) Regulations 2010.

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English Version

Leather - Upholstery leather characteristics - Guide for selection of leather for furniture

Cuir - Caractéristiques des cuirs pour la garniture - Guide
pour le choix de cuirs pour l'ameublement

Leder - Richtwerte für Möbelleder - Leitfaden zur Auswahl
von Möbelleder

This European Standard was approved by CEN on 11 August 2012.

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Foreword

This document (EN 13336:2012) has been prepared 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of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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.

This document supersedes EN 13336:2004.

The following is a list of technical changes since the previous edition:

- Tables A.1.a; A.1.b; A.1.c and A.2.1 have been rationalised in Table 1 and Table 2, with modifications
- pigmented leather values have been enlarged to coated and other kind of leather
- new parameter "dry flex resistance" has been introduced, as fundamental characteristic
- pH minimum value has been modified from 3,2 to 3,5
- colour fastness to water spotting" has been moved from subsidiary to fundamental characteristic

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Introduction

This document was prepared by CEN/TC 289 "Leather" in order to provide the leather and furniture industries with guidelines on which both sellers and buyers can base their negotiations.

1 Scope

This European Standard gives guidelines for the test methods and recommended values for upholstery leather for furniture.

This European Standard also specifies the sampling and conditioning procedures of specimens.

Furs, hair-on leathers and wool-on leathers are not covered by this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1021-1, *Furniture — Assessment of the ignitability of upholstered furniture — Part 1: Ignition source smouldering cigarette*

EN 1021-2, *Furniture — Assessment of the ignitability of upholstered furniture — Part 2: Ignition source match flame equivalent*

EN 15987:2011, *Leather — Terminology — Key definitions for the leather trade*

EN ISO 105-B02, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test (ISO 105-B02)*

EN ISO 2418, *Leather — Chemical, physical and mechanical and fastness tests — Sampling location (ISO 2418)*

EN ISO 2419, *Leather — Physical and mechanical tests — Sample preparation and conditioning (ISO 2419)*

EN ISO 3377-1, *Leather — Physical and mechanical tests — Determination of tear load — Part 1: Single edge tear (ISO 3377-1)*

EN ISO 4044, *Leather — Chemical tests — Preparation of chemical test samples (ISO 4044)*

EN ISO 4045, *Leather — Chemical tests — Determination of pH (ISO 4045)*

EN ISO 5402-1, *Leather — Determination of flex resistance — Part 1: Flexometer method (ISO 5402-1:2011)*

EN ISO 11640, *Leather — Tests for colour fastness — Colour fastness to cycles of to-and-fro rubbing (ISO 11640)*

EN ISO 11641, *Leather — Tests for colour fastness — Colour fastness to perspiration (ISO 11641)*

EN ISO 11644, *Leather — Test for adhesion of finish (ISO 11644)*

EN ISO 15700, *Leather — Tests for colour fastness — Colour fastness to water spotting (ISO 15700)*

EN ISO 17233, *Leather — Physical and mechanical tests — Determination of cold crack temperature of surface coatings (ISO 17233)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15987:2011 apply.

4 General principles

This document considers the performance of different types of leather intended for upholstery. The characteristics, recommended values and test methods are stated in Table 1. Subsidiary characteristics are stated in Table 2.

5 Sampling

If the leather piece available for testing is a whole hide or skin then the test specimens shall be sampled in accordance with standard procedures given in EN ISO 2418. If sampling in accordance with EN ISO 2418 is not possible (e.g. leathers are from finished products) details about the sampling shall be given in the test report.

6 Conditioning and sampling preparation

Leather samples shall be conditioned and prepared for physical, mechanical and fastness tests in accordance with the reference standard atmosphere specified in EN ISO 2419.

Leather samples for chemical tests shall be conditioned and prepared in accordance with EN ISO 4044.

7 Fundamental and complementary characteristics, test methods and recommended values

All the fundamental characteristics indicated in Table 1 shall be taken into account.

The complementary characteristics stated in Table 2 shall be agreed by the parties according to the intended end use of the leather.

Whilst the values in Tables 1 and 2 are typical of those expected, it is advisable to issue appropriate guidance with upholstered furniture to inform consumers of likely performance as well as in service care and maintenance instructions in order to avoid unnecessary problems.

Table 1 — Fundamental characteristics, test methods and recommended values

Fundamental characteristics	Test method		Recommended values		
			Nubuck, Suede and Aniline	Semi-aniline	Coated, Pigmented and other
pH and Δ pH	EN ISO 4045		$\geq 3,5$ If the pH value is $< 4,0 \Delta \text{pH} \leq 0,7$	$\geq 3,5$ If the pH value is $< 4,0 \Delta \text{pH} \leq 0,7$	$\geq 3,5$ If the pH value is $< 4,0 \Delta \text{pH} \leq 0,7$
Tear load, average value	EN ISO 3377-1		$> 20 \text{ N}$	$> 20 \text{ N}$	$> 20 \text{ N}$
Colour fastness to to-and-fro rubbing:	EN ISO 11640 Total mass of finger 1 000 g EN ISO 11641 Perspiration alkaline solution is defined in EN ISO 11641.	Aspects to be evaluated	Change of leather colour and felt staining	Change of leather colour and felt staining No destruction of finish	Change of leather colour and felt staining No destruction of finish
		- using dry felt	50 cycles, ≥ 3 grey scale	500 cycles, ≥ 4 grey scale	500 cycles, ≥ 4 grey scale
		- using wet felt	20 cycles, ≥ 3 grey scale	80 cycles, $\geq 3/4$ grey scale	250 cycles, $\geq 3/4$ grey scale
		- using felt wetted with artificial perspiration	20 cycles, ≥ 3 grey scale	50 cycles, $\geq 3/4$ grey scale	80 cycles, $\geq 3/4$ grey scale
Colour fastness to artificial light	EN ISO 105-B02 (Method 3)		≥ 3 blue scale	≥ 4 blue scale	≥ 5 blue scale
Dry finish adhesion	EN ISO 11644		-	$\geq 2 \text{ N}/10 \text{ mm}$	$\geq 2 \text{ N}/10 \text{ mm}$
Dry flex resistance	EN ISO 5402-1		For aniline leather with non-pigmented finish only, 20 000 cycles (no finish damage cracks)	50 000 cycles (no finish damage cracks)	50 000 cycles (no finish damage cracks)
Colour fastness to water spotting	EN ISO 15700		≥ 3 grey scale (No permanent swelling)	≥ 3 grey scale (No permanent swelling)	≥ 3 grey scale (No permanent swelling)

Table 2 — Complementary characteristics, test methods and recommended values

Complementary characteristics	Test methods	Recommended values		
		Nubuck, Suede and Aniline	Semi-aniline	Coated, Pigmented and Other
Cold crack resistance of finish	EN ISO 17233		- 15 °C (no finish crack)	- 15 °C (no finish crack)
Burning behaviour Use in absence of national regulations	EN 1021-1 and EN 1021-2 No soaking	Pass	Pass	Pass

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