

BS EN 16419:2014



BSI Standards Publication

# Leather — Chamois leather for cleaning purposes — Classification and requirements

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**National foreword**

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

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English Version

## Leather - Chamois leather for cleaning purposes - Classification and requirements

Cuir - Peau chamoisée - Classification et exigences

Leder - Sämschleder für Reinigungszwecke -  
Klassifizierung und Anforderungen

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## **Foreword**

This document (EN 16419:2014) 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of an identical text or by endorsement, at the latest by July 2014, and conflicting national standards shall be withdrawn at the latest by July 2014.

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## **Introduction**

Chamois leather for cleaning purposes is used notably for drying and polishing smooth surfaces, such as car bodies and windows.

Its properties are the rapid absorption and release of water, performances that remain unaltered even after a long usage period.

Chamois leather for cleaning purposes is made only from first choice ovine skins. Generally, chamois leather is trimmed before sale only in order to achieve a homogenous and symmetrical size or shape. Chamois leathers have the natural colour conferred by the oil tanning, homogeneous and uniform all over the surface. Their appearance is soft, velvety on both sides, without any traces of grain, holes, cuts and seams.

## 1 Scope

This European Standard applies to chamois leather for cleaning purposes and defines both requirements and standard test methods.

## 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 15987, *Leather - Terminology - Key definitions for the leather trade*

EN ISO 2417, *Leather - Physical and mechanical tests - Determination of the static absorption of water (ISO 2417)*

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 2589, *Leather - Physical and mechanical tests - Determination of thickness (ISO 2589)*

EN ISO 3376, *Leather - Physical and mechanical tests - Determination of tensile strength and percentage extension (ISO 3376)*

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

EN ISO 3380, *Leather - Physical and mechanical tests - Determination of shrinkage temperature up to 100 degrees C (ISO 3380)*

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 4047, *Leather - Determination of sulphated total ash and sulphated water-insoluble ash (ISO 4047)*

EN ISO 4048, *Leather - Chemical tests - Determination of matter soluble in dichloromethane and free fatty acid content (ISO 4048)*

EN ISO 4684, *Leather - Chemical tests - Determination of volatile matter (ISO 4684)*

EN ISO 5398-1, *Leather - Chemical determination of chromic oxide content - Part 1: Quantification by titration (ISO 5398-1)*

EN ISO 5398-2, *Leather - Chemical determination of chromic oxide content - Part 2: Quantification by colorimetric determination (ISO 5398-2)*

EN ISO 5398-3, *Leather - Chemical determination of chromic oxide content - Part 3: Quantification by atomic absorption spectrometry (ISO 5398-3)*

EN ISO 5398-4, *Leather - Chemical determination of chromic oxide content - Part 4: Quantification by inductively coupled plasma - optical emission spectrometer (ICP-OES) (ISO 5398-4)*

EN ISO 11646, *Leather - Measurement of area (ISO 11646)*

EN ISO 17072-2, *Leather - Chemical determination of metal content - Part 2: Total metal content (ISO 17072-2)*

EN ISO 17226-1, *Leather - Chemical determination of formaldehyde content - Part 1: Method using high performance liquid chromatography (ISO 17226-1)*

### **3 Terms and definitions**

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

**3.1**  
**hole**  
flaying damage caused by a knife or flaying tool or mechanical operation on the flesh side, completely perforating the hide or skin

**3.2**  
**cut**  
mark made on the hide or skin by a knife or flaying tool on the flesh side which has cut into the dermis or skin substance, not completely perforating the hide or skin

**3.3**  
**scar**  
defect caused by healed wound, slash, gash or cut due to brand marks, scratches (barbed wire, bramble, damage from transport or dragging, marks from cattle comb, rope marks, etc.), goading hits, surgical operations

**3.4**  
**cockly places**  
areas of skin which do not absorb the dressing in the same way as the rest of the skin and are harder in texture and usually darker in colour

**3.5**  
**tanning heavy metals**  
tanning metals are Cr, Al, Ti, Zr

**3.6**  
**other heavy metals**  
other heavy metals are: Antimony (Sb), Arsenic (As), Barium (Ba), Boron (B), Cadmium (Cd), Cobalt (Co), Copper (Cu), Lead (Pb), Mercury (Hg), Nickel (Ni), Tin (Sn), Zinc (Zn)

### **4 Sampling and conditioning**

Samples shall be taken according to EN ISO 2418 and conditioned according to EN ISO 2419.

Analytical results of the characteristics of chamois leather shall be referred to the mean value of the samples coming from the same batch, determined according to EN ISO 4684.

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



## 5 Classification by quality

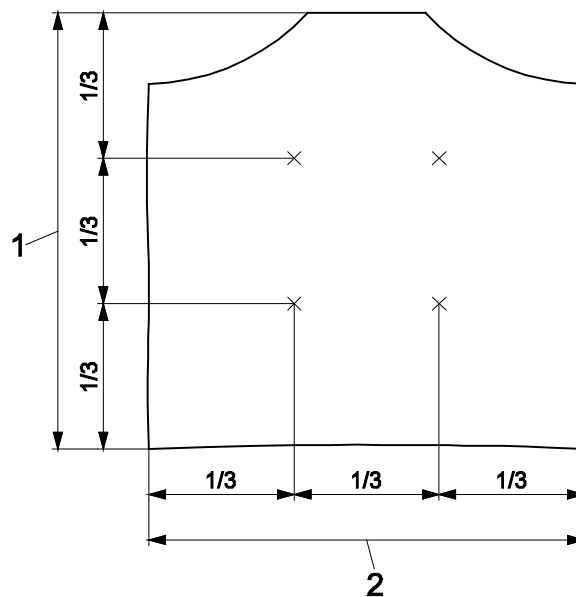
Chamois leathers are classified as following:

### 5.1 First class:

- thin places, holes, cuts, hard and cockly places and healed scars or residual seams and grain traces shall be absent;
- chamois leather shall be of even thickness ( $>0,7$  mm measured according to EN ISO 2589), for the all the points shown in Figure 1;
- chamois leather shall be suede finished on both side.

### 5.2 Second class:

- thickness 0,4 mm - 0,7 mm;
- holes, cuts, hard and cockly places and healed scars or residual seams and grain traces shall be absent; some defect like unhealed scars and slight differences in thickness are allowed;
- chamois leather shall be suede finished on one or both sides.



#### Key

- 1 length
- 2 width

Figure 1 — Typical points where chamois leather thickness is measured

## 6 Requirements

Chamois leather shall satisfy the requirements shown in Table 1.

**Table 1 — Characteristics and essential requirements**

Characteristics		Requirements		Test methods
Chemical content		First class	Second class	Updated standard test method for, as appropriate
1	Tanning metals, total content	≤ 200 mg/kg	≤ 200 mg/kg	(Cr determination) EN ISO 5398-1, EN ISO 5398-2, EN ISO 5398-3 and EN ISO 5398-4 <sup>a</sup> Other tanning metals (Al, Ti, Zr) EN ISO 17072-2
2	Other heavy metals, total content	≤ 100 mg/kg	≤ 100 mg/kg	EN ISO 17072-2
3	Matter soluble in dichloromethane	≤ 15 %	≤ 15 %	EN ISO 4048
4	Sulphated total ashes	≤ 8 %	≤ 8 %	EN ISO 4047
5	Formaldehyde	≤ 50 mg/kg	≤ 50 mg/kg	EN ISO 17226-1
6	pH	≥ 5,5	≥ 5,5	EN ISO 4045
<b>Physical-mechanical characteristics</b>				
7	Tensile strength	≥ 10 N/mm <sup>2</sup>	≥ 8 N/mm <sup>2</sup>	EN ISO 3376
8	Elongation at break	≥ 50 %	≥ 50 %	EN ISO 3376
9	Tear load Single edge tear	≥ 15 N	≥ 15 N	EN ISO 3377-1
10	Static absorption of water	≥ 300 % after 2 min	≥ 200 % after 2 min	EN ISO 2417
11	Shrinkage temperature	≥ 64 °C	≥ 64 °C	EN ISO 3380
NOTE For point 9, the specimen is dipped in water for 2 min, then excess water is removed with filter paper before being tested.				
<sup>a</sup> One among the four parts is applicable for the Cr determination.				

## 7 Labelling

### 7.1 General

The label applied to the article shall contain the information included in 7.2 and, as appropriate, in 7.3.

### 7.2 Essential information

The following information shall be considered as essential for the labelling of chamois leathers:

- product name: chamois leather;
- surface measure (dm<sup>2</sup>), according to EN ISO 11646;
- country of origin (*where it has been tanned*);
- the class;
- the reference to this European Standard.

### 7.3 Additional information

The following information shall be considered as additional for the labelling of the chamois leathers:

- information related to use and maintenance;
- country name or Trade Mark.

## 8 Marking

The marking shall report at least the following information:

- the wording: “Chamois leather for cleaning purposes”;
- reference to this European, Standard;
- classification, according to Clause 5;
- surface measure, in dm<sup>2</sup>;
- country of origin.

Example of Marking: “Chamois leather for cleaning purposes – EN 16419 — First Class – 8,2 dm<sup>2</sup> made in Italy”.





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