

**Leather - Physical and mechanical tests -  
Determination of apparent density**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 2420:2003 sisaldab Euroopa standardi EN ISO 2420:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 2420:2003 consists of the English text of the European standard EN ISO 2420:2002.</p> <p>This document is endorsed on 15.04.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This International Standard specifies a method for determining the apparent density of leather. It is applicable to all heavy leather</p>	<p><b>Scope:</b> This International Standard specifies a method for determining the apparent density of leather. It is applicable to all heavy leather</p>
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**ICS** 59.140.30

**Võtmesõnad:** bulk density, leather, mechanical testing, physical testing, testing, tests

**English version**

**Leather**

**Physical and mechanical tests – Determination of apparent density  
(ISO 2420 : 2002)**

Cuir – Essais physiques et mécaniques – Détermination de la masse volumique apparente  
(ISO 2420 : 2002)

Leder – Physikalische und mechanische Prüfungen – Bestimmung der scheinbaren Dichte (ISO 2420 : 2002)

This European Standard was approved by CEN on 2002-06-08.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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Foreword

International Standard  
ISO 2420 : 2002 Leather – Physical and mechanical tests – Determination of apparent density, which was prepared by ISO/TC 120 ‘Leather’ of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 289 ‘Leather’, the Secretariat of which is held by UNI, as a European Standard.  
This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2003 at the latest.  
In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:  
Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 2420 : 2002 was approved by CEN as a European Standard without any modification as given above.

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## 1 Scope

This International Standard specifies a method for determining the apparent density of leather. It is applicable to all heavy 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	<i>Leather - Chemical, physical and mechanical and fastness tests - Sampling location</i>
ISO 2419	<i>Leather - Physical and mechanical tests - Sample preparation and conditioning</i>
ISO 2589	<i>Leather - Physical and mechanical tests - Determination of thickness</i>

## 3 Principle

The volume of a circular test piece is calculated from the diameter and thickness, treating the test piece as a right angled circular cylinder. The apparent density is obtained by dividing the mass by the volume.

## 4 Apparatus

**4.1 Press knife**, the inner wall of which is a right angled circular cylinder approximately 70 mm in diameter, as specified in ISO 2419.

**4.2 Thickness gauge**, as specified in ISO 2589.

**4.3 Balance**, reading to 0,001 g.

**4.4 Vernier callipers**, reading to 0,1 mm.

## 5 Sampling and sample preparation

Sample in accordance with ISO 2418. From the sample, cut three test pieces by applying the press knife (4.1) to the grain surface and condition them in accordance with ISO 2419.

**NOTE** If there is a requirement for more than two hides or skins to be tested in one batch, then only one test piece need be taken from each hide or skin, provided that the overall total is not less than three test pieces.