# **EESTI STANDARD**

# Leather - Chemical teats - Determination of matter soluble in dichloromethane and free fatty acid content

Leather - Chemical teats - Determination of matter anu Normania di Angelia No soluble in dichloromethane and free fatty acid content



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 4048:2008 sisaldab Euroopa standardi EN ISO 4048:2008 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4048:2008 consists of the English text of the European standard EN ISO 4048:2008.
Standard on kinnitatud Eesti Standardikeskuse 24.04.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 24.04.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.02.2008.	Date of Availability of the European standard text 15.02.2008.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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Võtmesõnad: ash, chemical analysis, determination of content, leather, mineral matter, sulphating analysis

2 Dreye

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

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Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## **EN ISO 4048**

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ICS 59.140.30

Supersedes EN ISO 4048:1998

**English Version** 

### Leather - Chemical tests - Determination of matter soluble in dichloromethane and free fatty acid content (ISO 4048:2008)

Cuir - Essais chimiques - Dosage des matières solubles dans le dichlorométhane et des acides gras libres (ISO 4048:2008)

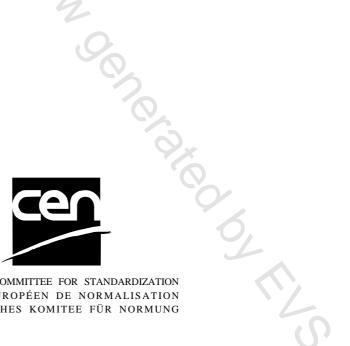
Leder - Chemische Prüfungen - Bestimmung der in Dichlormethan löslichen Substanzen und des freien Fettsäuregehalts (ISO 4048:2008)

This European Standard was approved by CEN on 3 February 2008.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### Foreword

This document (EN ISO 4048:2008) 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.

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 ISO 4048:1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

# Leather — Chemical tests — Determination of matter soluble in dichloromethane and free fatty acid content

### 1 Scope

This International Standard specifies a method for the determination of the substances in leather which are soluble in dichloromethane. This method is applicable to all types of leather.

Not all fatty and similar substances can be extracted from leather with organic solvents; they may be in part soluble and partly bound to the leather. On the other hand, the solvent can dissolve non-fatty substances, e.g. sulfur and impregnants, both of which cause difficulty in the determination of the acid value and saponification value of the fat.

This International Standard includes two techniques for extraction of the fatty substances: 1) extraction using the Soxhlet apparatus; and 2) extraction using a pressurized extraction system.

As the extraction is frequently done in conjunction with determination of the free fatty acid content of the leather, a suitable procedure for determination of the free fatty acids extracted by this method is included.

The apparatus and technique described in this method are also suitable for the extraction by solvents other than dichloromethane (although the temperature conditions may need to be varied for high pressure extraction).

### 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, Leather — Chemical, physical and mechanical and fastness tests — Sampling location

ISO 4044, Leather — Chemical tests — Preparation of chemical test samples

ISO 4098, Leather — Chemical tests — Determination of water-soluble matter, water-soluble inorganic matter and water-soluble organic matter

ISO 4684, Leather — Chemical tests — Determination of volatile matter

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

### extractable substances

fats and other soluble matter which can be extracted from leather with dichloromethane

### 3.2

#### free fatty acid content

fatty acid content of the extractable substances as determined by this method and expressed as oleic acid