

**Animal and vegetable fats and oils -
Determination of unsaponifiable matter -
Method using diethyl ether extraction**

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of unsaponifiable matter - Method using diethyl
ether extraction

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 3596:2002 sisaldab Euroopa standardi EN ISO 3596:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.02.2002 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 3596:2002 consists of the English text of the European standard EN ISO 3596:2001.</p> <p>This document is endorsed on 14.02.2002 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>Käsitlusala:</p> <p>This standard specifies a method using ether extraction for the determination of the unsaponifiable matter content of animal and vegetable fats and oils.</p>	<p>Scope:</p> <p>This standard specifies a method using ether extraction for the determination of the unsaponifiable matter content of animal and vegetable fats and oils.</p>
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ICS 67.200.10

Võtmesõnad: chemical analysis, chemical analysis and testin, definition, definitions, determination, determination of content, diethyl ether, extraction, extraction methods of analysis, fats, food products, oils, unsaponifiable matter, waxes, vegetable fats, vegetable oils

English version

Animal and vegetable fats and oils

Determination of unsaponifiable matter – Method using
diethyl ether extraction
(ISO 3596 : 2000)

Corps gras d'origines animale et
végétale – Détermination de la teneur
en matières insaponifiables –
Méthode par extraction à l'oxyde
diéthylique (ISO 3596 : 2000)

Tierische und pflanzliche Fette
und Öle – Bestimmung der unver-
seifbaren Bestandteile – Verfahren
mit Diethylether-Extraktion
(ISO 3596 : 2000)

This European Standard was approved by CEN on 2001-06-25.

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, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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

Foreword

International Standard

ISO 3596 : 2000 Animal and vegetable fats and oils – Determination of unsaponifiable matter – Method using diethyl ether extraction,

which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 307 'Oilseeds, vegetable and animal fats and oils and their by-products – Methods of sampling and analysis', the Secretariat of which is held by AFNOR, 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 February 2002 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, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 3596 : 2000 was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard specifies a method using diethyl ether extraction for the determination of the unsaponifiable matter content of animal and vegetable fats and oils.

This method is not applicable to waxes and, moreover, gives approximate results with certain fats of high unsaponifiable matter content, for example with fats derived from marine animals.

A method given in ISO 18609 may be used when climatic conditions, or regulations, do not permit the use of diethyl ether.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 661, *Animal and vegetable fats and oils — Preparation of test sample*.

3 Term and definition

For the purposes of this International Standard, the following term and definition applies.

3.1

unsaponifiable matter

all the substances present in the product which, after saponification of the latter by potassium hydroxide and extraction by a specified solvent, are not volatile under the specified operating conditions

4 Principle

The fat or oil is saponified by boiling under reflux with an ethanolic potassium hydroxide solution. The unsaponifiable matter is extracted from the soap solution by diethyl ether. The solvent is evaporated and the residue is weighed after drying.

5 Reagents

Use only reagents of recognized analytical grade and distilled or deionized water or water of equivalent purity.

5.1 Diethyl ether, freshly distilled, free from peroxides and residue.