

**Animal and vegetable fats and oils -
Determination of unsaponifiable matter -
Method using hexane extractio**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 18609:2002 sisaldab Euroopa standardi EN ISO 18609:2001 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 18609:2002 consists of the English text of the European standard EN ISO 18609:2001.</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 three hexane extractions 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 three hexane extractions 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: agri, animal fats, animal oils, chemical analysis and testing, chemical analysis and testing, determination of content, extraction, extraction methods of an, extraction methods of analysis, fats, hexane, oils, unsaponifiable matter, vegetable fats, vegetable oils

English version

Animal and vegetable fats and oils

Determination of unsaponifiable matter – Method using
hexane extraction
(ISO 18609 : 2000)

Corps gras d'origines animale
et végétale – Détermination de la
teneur en matières insaponifiables –
Méthode par extraction à l'hexane
(ISO 18609 : 2000)

Tierische und pflanzliche Fette
und Öle – Bestimmung der unverseif-
baren Bestandteile – Verfahren mit
Hexan-Extraktion (ISO 18609 : 2000)

This European Standard was approved by CEN on 2001-06-21.

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 18609 : 2000 Animal and vegetable fats and oils - Determination of unsaponifiable matter – Method using hexane 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 18609 : 2000 was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard specifies a method using three hexane extractions for the determination of the unsaponifiable matter content of animal and vegetable fats and oils.

The method is applicable to all fats and oils but not to waxes.

CAUTION — In comparison with the method given in ISO 3596, however, the present method gives results which are systematically low.

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 Terms and definitions

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 hexane, are not volatile under the specified operating conditions.

NOTE The unsaponifiable matter includes lipids of natural origin such as sterols, higher hydrocarbons and alcohols, aliphatic and terpenic alcohols, as well as any foreign organic matter extracted by the solvent and not volatile at 103 °C (e.g. mineral oils) that may be present.

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 hexane or, failing this, light petroleum. The solvent is evaporated and the residue is weighed after drying.