

## **Oilseed meals - Determination of oil content - Part 1: Extraction method with hexane (or light petroleum)**

Oilseed meals - Determination of oil content - Part 1:  
Extraction method with hexane (or light petroleum)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 734-1:2006 sisaldab Euroopa standardi EN ISO 734-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2006 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 734-1:2006 consists of the English text of the European standard EN ISO 734-1:2006.</p> <p>This document is endorsed on 21.12.2006 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></p> <p>This part of ISO 734 specifies a method for the determination of the hexane extract (or light-petroleum extract), called "oil content", of meals (excluding compounded products) obtained by the extraction of oil from oilseeds by pressure or solvents.</p>	<p><b>Scope:</b></p> <p>This part of ISO 734 specifies a method for the determination of the hexane extract (or light-petroleum extract), called "oil content", of meals (excluding compounded products) obtained by the extraction of oil from oilseeds by pressure or solvents.</p>
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English Version

**Oilseed meals - Determination of oil content - Part 1: Extraction  
method with hexane (or light petroleum) (ISO 734-1:2006)**

Tourteaux de graines oléagineuses - Détermination de la  
teneur en huile - Partie 1: Méthode par extraction à  
l'hexane (ou à l'éther de pétrole) (ISO 734-1:2006)

Ölsamenschrote - Bestimmung des Ölgehaltes - Teil 1:  
Extraktionsverfahren mit Hexan (oder Petrolether) (ISO  
734-1:2006)

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## Foreword

This document (EN ISO 734-1:2006) has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" in collaboration with 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.

This document supersedes EN ISO 734-1:2000.

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 May 2007, and conflicting national standards shall be withdrawn at the latest by May 2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 United Kingdom.

## Endorsement notice

The text of ISO 734-1:2006 has been approved by CEN as EN ISO 734-1:2006 without any modifications.

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content —**

**Part 1:  
Extraction method with hexane (or light  
petroleum)**

*Tourteaux de graines oléagineuses — Détermination de la teneur en  
huile —*

*Partie 1: Méthode par extraction à l'hexane (ou à l'éther de pétrole)*



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## Foreword

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 734-1 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 2, *Oleaginous seeds and fruits and oilseed meals*.

This second edition cancels and replaces the first edition (ISO 734-1:1998), Annex A of which has been technically revised.

ISO 734 consists of the following parts, under the general title *Oilseed meals — Determination of oil content*:

- *Part 1: Extraction method with hexane (or light petroleum)*
- *Part 2: Rapid extraction method*

## Introduction

A method for the determination of the oil content of oilseeds has been specified in ISO 659. It is therefore necessary to provide for control of oil production by establishing a reference method for the determination of the oil content of oilseed meals in the same way.



# Oilseed meals — Determination of oil content —

## Part 1:

## Extraction method with hexane (or light petroleum)

### 1 Scope

This part of ISO 734 specifies a method for the determination of the hexane extract (or light-petroleum extract), called “oil content”, of meals (excluding compounded products) obtained by the extraction of oil from oilseeds by pressure or solvents.

### 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 771, *Oilseed residues — Determination of moisture and volatile matter content*

ISO 5502, *Oilseed residues — Preparation of test samples*

### 3 Terms and definitions

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

#### 3.1

##### oil content

all of the substances extracted under the operating conditions specified in this part of ISO 734, and expressed as a mass fraction, in percent, of the product as received

NOTE The oil content may also be expressed relative to dry matter.

### 4 Principle

A test portion of the product is extracted in a suitable apparatus, with technical hexane or, failing this, light petroleum. The solvent is eliminated and the extract obtained is weighed.

### 5 Reagents

Use only reagents of recognized analytical grade, unless otherwise specified.

**5.1 Technical hexane, *n*-hexane or light petroleum**, essentially composed of hydrocarbons with six carbon atoms.

Less than 5 % shall distil below 50 °C and more than 95 % between 50 °C and 70 °C.

For any of these solvents, the residue on complete evaporation shall not exceed 2 mg per 100 ml.