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**Oilseed meals — Determination of oil  
content — Extraction method with  
hexane (or light petroleum)**

*Tourteaux de graines oléagineuses — Détermination de la teneur en  
huile — Méthode par extraction à l'hexane (ou à l'éther de pétrole)*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 34, *Food products*, Subcommittee SC 2, *Oleaginous seeds and fruits and oilseed meals*.

This second edition cancels and replaces ISO 734-1:2006, which has been renumbered and editorially revised.

## 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 — Extraction method with hexane (or light petroleum)

## 1 Scope

This International Standard 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 International Standard, and expressed as a mass fraction, in percent, of the product as received

Note 1 to entry: 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.

## 6 Apparatus

Usual laboratory apparatus and, in particular, the following.