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Irish Standard  
I.S. EN ISO 8292-2:2010

# Animal and vegetable fats and oils - Determination of solid fat content by pulsed NMR - Part 2: Indirect method (ISO 8292-2:2008)

## I.S. EN ISO 8292-2:2010

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English Version

**Animal and vegetable fats and oils - Determination of solid fat content by pulsed NMR - Part 2: Indirect method (ISO 8292-2:2008)**

Corps gras d'origines animale et végétale - Détermination de la teneur en corps gras solides par RMN pulsée - Partie 2: Méthode indirecte (ISO 8292-2:2008)

Tierische und pflanzliche Fette und Öle - Bestimmung des Festanteils von Fett durch das Verfahren mit gepulster magnetischer Kernresonanz - Teil 2: Indirektes Verfahren (ISO 8292-2:2008)

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## **Foreword**

The text of ISO 8292-2:2008 has been prepared by Technical Committee ISO/TC 34 “Food products” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 8292-2:2010 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.

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of an identical text or by endorsement, at the latest by October 2010, and conflicting national standards shall be withdrawn at the latest by October 2010.

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.

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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, Croatia, 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.

### **Endorsement notice**

The text of ISO 8292-2:2008 has been approved by CEN as a EN ISO 8292-2:2010 without any modification.

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**Animal and vegetable fats and oils —  
Determination of solid fat content by  
pulsed NMR —**

**Part 2:  
Indirect method**

*Corps gras d'origines animale et végétale — Détermination de la teneur  
en corps gras solides par RMN pulsée —*

*Partie 2: Méthode indirecte*



Reference number  
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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 8292-2 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 11, *Animal and vegetable fats and oils*.

This part of ISO 8292, together with ISO 8292-1, cancel and replace ISO 8292:1991.

ISO 8292 consists of the following parts, under the general title *Animal and vegetable fats and oils — Determination of solid fat content by pulsed NMR*:

- *Part 1: Direct method*
- *Part 2: Indirect method*

# Animal and vegetable fats and oils — Determination of solid fat content by pulsed NMR —

## Part 2: Indirect method

### 1 Scope

This part of ISO 8292 specifies an indirect method for the determination of the solid fat content in animal and vegetable fats and oils (hereafter designated “fats”) using low-resolution pulsed nuclear magnetic resonance (NMR) spectrometry.

Two alternative thermal pre-treatments are specified: one for general purpose fats not exhibiting pronounced polymorphism and which stabilize mainly in the  $\beta'$ -polymorph; and one for fats similar to cocoa butter which exhibit pronounced polymorphism and stabilize in the  $\beta$ -polymorph. Additional thermal pre-treatments, which may be more suitable for specific purposes, are given in an informative annex.

The indirect method is less easy to carry out and less reproducible than the direct method, but is more accurate and more universally applicable to all fats.

NOTE A direct method is specified in ISO 8292-1.

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

ISO 3960, *Animal and vegetable fats and oils — Determination of peroxide value — Iodometric (visual) endpoint determination*

ISO 8292-1, *Animal and vegetable fats and oils — Determination of solid fat content by pulsed NMR — Part 1: Direct method*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8292-1 apply.

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