Teravili ja kaunvili. Lämmastikusisalduse määramine ja toorproteiini sisalduse arvutamine. Kjeldahli meetod

Cereals and pulses - Determination of the nitrogen content and calculation of the crude protein content -Kjeldahl method (ISO 20483:2013)



#### EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN ISO 20483:2013 sisaldab Euroopa standardi EN ISO 20483:2013 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 04.12.2013.

Standard on kättesaadav Eesti Standardikeskusest.

# NATIONAL FOREWORD

This Estonian standard EVS-EN ISO 20483:2013 consists of the English text of the European standard EN ISO 20483:2013.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.

Date of Availability of the European standard is 04.12.2013.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 67.060

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

# **EN ISO 20483**

December 2013

ICS 67.060

Supersedes EN ISO 20483:2006

## **English Version**

# Cereals and pulses - Determination of the nitrogen content and calculation of the crude protein content - Kjeldahl method (ISO 20483:2013)

Céréales et légumineuses - Détermination de la teneur en azote et calcul de la teneur en protéines brutes - Méthode de Kjeldahl (ISO 20483:2013)

Getreide und Hülsenfrüchte - Bestimmung des Stickstoffgehaltes und Berechnung des Rohproteingehaltes - Kjeldahl-Verfahren (ISO 20483:2013)

This European Standard was approved by CEN on 7 September 2013.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

# **Foreword**

This document (EN ISO 20483:2013) has been prepared by Technical Committee ISO/TC 34 "Food products" in collaboration with Technical Committee CEN/TC 338 "Cereal and cereal products" 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 June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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.

This document supersedes EN ISO 20483:2006.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# **Endorsement notice**

The text of ISO 20483:2013 has been approved by CEN as EN ISO 20483:2013 without any modification.

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# Cereals and pulses — Determination of the nitrogen content and calculation of the crude protein content — Kjeldahl method

WARNING — The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety practices and determine the applicability of regulatory limitations prior to use.

# 1 Scope

This International Standard specifies a method for the determination of the nitrogen content of cereals, pulses and derived products, according to the Kjeldahl method, and a method for calculating the crude protein content.

The method does not distinguish between protein nitrogen and non-protein nitrogen. If it is important to determine the non-protein nitrogen content, an appropriate method can be applied.

NOTE In certain cases, full recovery of the nitrogen in nitrates and nitrites is not possible by this method.

#### 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 712, Cereals and cereal products — Determination of moisture content — Routine reference method

ISO 6540, Maize — Determination of moisture content (on milled grains and on whole grains)

# 3 Terms and definitions

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

#### 3.1

## nitrogen content

quantity of nitrogen determined after application of the procedure described in this International Standard

NOTE It is expressed as mass fraction of dry product, in percent.

#### 3.2

#### crude protein content

quantity of crude protein obtained from the nitrogen content as determined by applying the method described in this document, calculated by multiplying this content by an appropriate factor depending on the type of cereal or pulse

NOTE It is expressed as mass fraction of dry product, in percent.