

Õliseemned. Õlisisalduse määramine (võrdlusmeetod)

Oilseeds - Determination of oil content (Reference method)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 659:2010 sisaldab Euroopa standardi EN ISO 659:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.07.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 659:2010 consists of the English text of the European standard EN ISO 659:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 01.07.2009.

The standard is available from Estonian standardisation organisation.

ICS 67.200.20

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute Estonian Standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:
Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: +372 605 5050; E-mail: info@evs.ee

English Version

Oilseeds - Determination of oil content (Reference method) (ISO
659:2009)

Graines oléagineuses - Détermination de la teneur en huile
(Méthode de référence) (ISO 659:2009)

Ölsamen - Bestimmung des Ölgehaltes
(Referenzverfahren) (ISO 659:2009)

This European Standard was approved by CEN on 3 June 2009.

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 CEN Management Centre or to any CEN member.

This European Standard exists 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 659:2009) has been prepared by Technical Committee ISO/TC 34 "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 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 January 2010, and conflicting national standards shall be withdrawn at the latest by January 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.

This document supersedes EN ISO 659:1998.

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, 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 659:2009 has been approved by CEN as a EN ISO 659:2009 without any modification.

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Reagent	2
6 Apparatus	2
7 Sampling	3
8 Preparation of test sample	3
8.1 Reduction of laboratory sample	3
8.2 Predrying	3
8.3 Test sample	4
9 Procedure	5
9.1 General.....	5
9.2 Test portion	5
9.3 Determination	6
9.4 "Oil content" of impurities	7
10 Expression of results	7
10.1 Method of calculation	7
11 Precision	10
11.1 Interlaboratory test programme	10
11.2 Repeatability.....	10
11.3 Reproducibility	10
12 Test report	10
Annex A (informative) Results of interlaboratory tests on the determination of oil content	11
Bibliography	12

Oilseeds — Determination of oil content (Reference method)

1 Scope

This International Standard specifies a reference method for the determination of the hexane extract (or light petroleum extract), called the “oil content”, of oilseeds used as industrial raw materials. The procedure for sunflower seed is different from those for other seeds as it includes an additional moisture content determination after the seed has been ground to prepare the test sample.

The method has been tested on rapeseed, soya beans and sunflower seed. This does not, however, preclude its applicability to other commercial seeds.

If required, the pure seeds and the impurities (see 9.4) can be analysed separately. In the case of groundnuts (see 10.1.6), the pure seeds, the total fines, the non-oleaginous impurities and the oleaginous impurities can be analysed separately.

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 658, *Oilseeds — Determination of content of impurities*

ISO 664, *Oilseeds — Reduction of laboratory sample to test sample*

ISO 665, *Oilseeds — Determination of moisture and volatile matter content*

3 Terms and definitions

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

3.1

hexane extract “oil content”

all the substances extracted under the operating conditions specified in this International Standard, expressed as a percentage by mass of the product as received, or on the cleaned seed

NOTE On request, it may be expressed relative to the dry matter.

4 Principle

The oil is extracted from a test portion, in a suitable apparatus, with hexane or light petroleum. The solvent is removed from the extract and the extract weighed. Due to the varied nature of seeds, there are some variations in the procedure for different seeds.