

**Loomsed ja taimsed rasvad ja õlid.
Katseproovide ettevalmistamine**

Animal and vegetable fats and oils - Preparation of
test sample

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 661:2000 sisaldab Euroopa standardi EN ISO 661:1995 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 661:2000 consists of the English text of the European standard EN ISO 661:1995.

This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

ICS 67.200.10

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Descriptors: Fats, oils, sample preparation, foodstuffs.

English version

Animal and vegetable fats and oils

Preparation of test sample
(ISO 661:1989)

Corps gras d'origines animale et
végétale; préparation de l'échantillon
pour essai (ISO 661:1989)

Tierische und pflanzliche Fette und Öle;
Vorbereitung der Untersuchungsprobe
(ISO 661:1989)

This European Standard was approved by CEN on 1995-01-05 and is identical to the ISO Standard as referred to.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 661:1989 Animal and vegetable fats and oils; preparation of test sample, which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 307 'Oilseeds, vegetable and animal fats and oils and their by-products; methods of sampling and analysis' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by October 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 661:1989 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

1 Scope

This International Standard specifies procedures for the preparation of a test sample from a laboratory sample of animal or vegetable fats and oils for the purpose of analysis.

The method is not applicable to emulsified fats such as butter, margarine, mayonnaise, etc.

2 Principle

Mixing of the fatty matter, heated, if necessary, to an appropriate temperature. If required, separation of insoluble substances by filtration and removal of water by drying with anhydrous sodium sulfate.

3 Reagent

Sodium sulfate, anhydrous.

4 Apparatus

4.1 Electric drying oven, with means of temperature regulation.

4.2 Heated filter funnel.

5 Procedure

5.1 Mixing and filtration

5.1.1 Liquid sample, clear and without sediment

Render the laboratory sample as homogeneous as possible by shaking the closed container.

5.1.2 Liquid sample, turbid or with sediment

5.1.2.1 For the determination of

- a) moisture and volatile matter,
- b) insoluble impurities,

c) mass per unit volume, and/or

d) any other determination requiring the use of unfiltered samples or if the determination is affected by heat,

vigorously shake the container (holding the laboratory sample) until the sediment is completely separated from the walls of the container. Immediately pour the sample into another container and check that no sediment remains adhering to the walls of the original container; if it does, remove it completely (if necessary, cutting open the container) and incorporate in the body of the sample.

5.1.2.2 For all other determinations, place the container holding the laboratory sample in the drying oven (4.1) controlled at 50 °C, leave it until the sample has reached this temperature and then proceed as in 5.1.1. If, after heating and mixing, the sample is not completely clear, filter the oil, carrying out the operation inside the oven maintained at 50 °C or by means of the heated filter funnel (4.2). Do not leave the sample in the oven for longer than necessary, in order to avoid any modification of the fatty matter by oxidation or polymerization. The filtrate shall be perfectly clear.

5.1.3 Solid sample

5.1.3.1 For the determinations a) to d) specified in 5.1.2.1, gently warm the laboratory sample until it is just mixable and mix thoroughly in order to render it as homogeneous as possible.

5.1.3.2 For all other determinations, melt the laboratory sample by keeping it in the drying oven (4.1), controlled at a temperature at least 10 °C above the melting temperature of the particular fat or oil. If, after heating, the sample is perfectly clear, proceed as in 5.1.1; if it is turbid or if it contains a sediment, filter it at the chosen temperature, either inside the oven or by means of the heated filter funnel (4.2). The filtrate shall be perfectly clear.

5.2 Drying

If the mixed sample still contains moisture (especially in the case of acid oils, fatty acids and solid fats), it shall be dried for those determinations in which the results may be affected by the presence of moisture (for example iodine value), taking all necessary precautions to avoid its oxidation. For this purpose, keep part of the thoroughly mixed sample (see 5.1.1, 5.1.2.2, or 5.1.3.2, as appropriate) in the drying oven (4.1) for as short a period as possible, at a temperature 10 °C above the melting