

LOOMSED JA TAIMSED RASVAD JA ÕLID. JOODIARVU
MÄÄRAMINE

Animal and vegetable fats and oils - Determination of
iodine value (ISO 3961:2024)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>See Eesti standard EVS-EN ISO 3961:2025 sisaldab Euroopa standardi EN ISO 3961:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.01.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p> | <p>This Estonian standard EVS-EN ISO 3961:2025 consists of the English text of the European standard EN ISO 3961:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 08.01.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p> |
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EUROPEAN STANDARD

EN ISO 3961

NORME EUROPÉENNE

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Animal and vegetable fats and oils - Determination of iodine value (ISO 3961:2024)

Corps gras d'origines animale et végétale -
Détermination de l'indice d'iode (ISO 3961:2024)

Tierische und pflanzliche Fette und Öle - Bestimmung
der Iodzahl (ISO 3961:2024)

This European Standard was approved by CEN on 19 December 2024.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (EN ISO 3961:2025) 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of an identical text or by endorsement, at the latest by July 2025, and conflicting national standards shall be withdrawn at the latest by July 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 3961:2018.

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Endorsement notice

The text of ISO 3961:2024 has been approved by CEN as EN ISO 3961:2025 without any modification.

Contents

| | Page |
|--|-----------|
| Foreword | iv |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Principle | 1 |
| 5 Reagents | 2 |
| 6 Apparatus | 2 |
| 7 Sampling | 2 |
| 8 Preparation of the test sample and test portion | 3 |
| 9 Procedure | 3 |
| 10 Calculation | 4 |
| 11 Precision | 4 |
| 11.1 Interlaboratory test..... | 4 |
| 11.2 Repeatability limit, r | 4 |
| 11.3 Reproducibility limit, R | 4 |
| 12 Test report | 5 |
| Annex A (informative) Interlaboratory test | 6 |
| Annex B (informative) Calculated iodine value for non-fish oils | 8 |
| Bibliography | 11 |

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 document 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).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 11, *Animal and vegetable fats and oils*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 307, *Oilseeds, vegetable and animal fats and oils and their by-products - Methods of sampling and analysis*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This seventh edition cancels and replaces the sixth edition (ISO 3961:2018), of which it constitutes a minor revision.

The changes are as follows:

- entry errors have been corrected in [Table 1](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Animal and vegetable fats and oils — Determination of iodine value

1 Scope

This document specifies a reference method for the determination of the iodine value (commonly known in the industry as IV) of animal and vegetable fats and oils, hereinafter referred to as fats.

[Annex B](#) describes a method for the calculation of the IV from fatty acid compositional data. This method is not applicable to fish oils. Furthermore, cold-pressed, crude and unrefined vegetable oils as well as (partially) hydrogenated oils can give different results by the two methods. The calculated IV is affected by impurities and thermal degradation products.

NOTE The method in [Annex B](#) is based upon the AOCS Official method Cd 1c-85^[10].

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 iodine value IV

mass of halogen, expressed as iodine, absorbed by the test portion following the specified procedure, divided by the mass of the test portion

Note 1 to entry: The IV is expressed as a mass fraction in grams per 100 g of fat.

4 Principle

Dissolution of a test portion in solvent and addition of Wijs reagent. After a specified time, addition of potassium iodide and water, and titration of the liberated iodine with sodium thiosulfate solution.

NOTE [Annex B](#) describes a method for the calculation of the IV from fatty acid compositional data. However, this is not intended to be a rapid method. The method gives two results from one analytical procedure. The volumetric method is the reference method.