



SLOVENSKI STANDARD SIST EN ISO 3961:2013

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Nadomešča:
SIST EN ISO 3961:2012

Rastlinske in živalske maščobe in olja - Ugotavljanje jodnega števila (ISO 3961:2013)

Animal and vegetable fats and oils - Determination of iodine value (ISO 3961:2013)

Tierische und pflanzliche Fette und Öle - Bestimmung der Iodzahl (ISO 3961:2013)

Corps gras d'origines animale et végétale - Détermination de l'indice d'iode (ISO 3961:2013)

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Ta slovenski standard je istoveten z: **EN ISO 3961:2013**

ICS:

67.200.10	Rastlinske in živalske maščobe in olja	Animal and vegetable fats and oils
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 3961

July 2013

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Supersedes EN ISO 3961:2011

English Version

Animal and vegetable fats and oils - Determination of iodine value (ISO 3961:2013)

Corps gras d'origines animale et végétale - Détermination de l'indice d'iode (ISO 3961:2013)

Tierische und pflanzliche Fette und Öle - Bestimmung der Iodzahl (ISO 3961:2013)

This European Standard was approved by CEN on 5 July 2013.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN ISO 3961:2013) 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 2014, and conflicting national standards shall be withdrawn at the latest by January 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 3961:2011.

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.

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Endorsement notice

The text of ISO 3961:2013 has been approved by CEN as EN ISO 3961:2013 without any modification.

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INTERNATIONAL
STANDARD

ISO
3961

Fifth edition
2013-07-15

**Animal and vegetable fats and oils —
Determination of iodine value**

*Corps gras d'origines animale et végétale — Détermination de
l'indice d'iode*

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
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E-mail copyright@iso.org
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ISO 3961:2013(E)

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2, www.iso.org/directives.

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received, www.iso.org/patents.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 34, *Food products*, Subcommittee SC 11, *Animal and vegetable fats and oils*.

This fifth edition cancels and replaces the fourth edition (ISO 3961:2009), which has been technically revised.

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Animal and vegetable fats and oils — Determination of iodine value

1 Scope

This International Standard 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.^[9]

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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

[SIST EN ISO 3961:2013](#)

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

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.

5 Reagents

Use only reagents of recognized analytical grade.

WARNING — Attention is drawn to the regulations which specify the handling of hazardous substances. Technical, organizational and personal safety measures shall be followed. Wijs solution causes severe burns; vapours can cause lung and eye damage. A fume hood shall be used for the work.