



SLOVENSKI STANDARD SIST EN ISO 15303:2009

01-april-2009

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Animal and vegetable fats and oils - Detection and identification of a volatile organic contaminant by GC/MS (ISO 15303:2001)

Tierische und pflanzliche Fette und Öle - Nachweis und Identifizierung einer flüchtigen organischen Verunreinigung mittels GC/MS (ISO 15303:2001)

Corps gras d'origines animale et végétale - Détection et identification d'un contaminant organique volatil par CPG/SM (ISO 15303:2001)

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Ta slovenski standard je istoveten z: EN ISO 15303:2008

ICS:

67.200.10	Üæ dā •\^/å Áãæ\^ { æ [à^/å Á æ	Animal and vegetable fats and oils
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SIST EN ISO 15303:2009

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 15303

November 2008

ICS 67.200.10

English Version

**Animal and vegetable fats and oils - Detection and identification
of a volatile organic contaminant by GC/MS (ISO 15303:2001)**

Corps gras d'origines animale et végétale - Détection et
identification d'un contaminant organique volatil par
CPG/SM (ISO 15303:2001)

Tierische und pflanzliche Fette und Öle - Nachweis und
Identifizierung einer flüchtigen organischen Verunreinigung
mittels GC/MS (ISO 15303:2001)

This European Standard was approved by CEN on 23 October 2008.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

Foreword.....	3
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[SIST EN ISO 15303:2009](https://standards.iteh.ai/catalog/standards/sist/28fce400-45bf-4992-9528-b2be2302c842/sist-en-iso-15303-2009)

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Foreword

The text of ISO 15303:2001 has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15303:2008 by 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 May 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

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.

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.

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INTERNATIONAL STANDARD

ISO
15303

First edition
2001-09-15

Animal and vegetable fats and oils — Detection and identification of a volatile organic contaminant by GC/MS

*Corps gras d'origines animale et végétale — Détection et identification d'un
contaminant organique volatil par CPG/SM*

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ISO 15303:2001(E)

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Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative reference	1
3 Principle.....	1
4 Reagents.....	2
5 Apparatus	2
6 Procedure	3
6.1 Preparation of standard and blank	3
6.2 Preparation of internal standards	3
6.3 Preparation of analytical sample.....	3
6.4 Determination by GC/MS analysis	3
6.5 Identification.....	4
7 Calculation and expression of results.....	4
7.1 Calculation.....	4
7.2 Expression of results	5
8 Precision.....	5
8.1 Interlaboratory tests	5
8.2 Repeatability.....	5
8.3 Reproducibility.....	5
Annex A (informative) Results of interlaboratory tests.....	6
Bibliography.....	10

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(standards.iteh.ai)

[SIST EN ISO 15303:2009](http://standards.iteh.ai/catalog/standards/sist/28fce400-45bf-4992-9528-b2be2302c842/sist-en-iso-15303-2009)

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ISO 15303:2001(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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

International Standard ISO 15303 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 11, *Animal and vegetable fats and oils*.

Annex A of this International Standard is for information only.

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Animal and vegetable fats and oils — Detection and identification of a volatile organic contaminant by GC/MS

1 Scope

This International Standard specifies a method for the detection and identification of a volatile organic contaminant in edible oils.

It is applicable to the identification of volatile industrial chemicals in both crude and refined edible oils that are suspected of being contaminated. It also enables determination of the concentration of the contaminant.

This International Standard is not applicable to the determination of the concentration of chemicals that may react with the edible oil or with one of its natural components. In these cases, the presence of the contaminant may sometimes be established on a qualitative basis. Also, this International Standard is not applicable to non-volatile chemicals.

This method has been shown to be applicable for the identification of the following compound classes:

- saturated halogenated hydrocarbons;
- unsaturated halogenated hydrocarbons;
- esters; aldehydes; alcohols; amines; ketones; ethers;
- cyclic and aromatic compounds;
- nitrogen compounds;
- acrylates; etc.

The method has been evaluated for concentrations in the range of 1 mg/kg to 10 mg/kg.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 661:1989, *Animal and vegetable fats and oils — Preparation of test sample*

3 Principle

A deuterated reference compound with a GC retention time close to that of the suspected contaminant is added to the oil at a concentration close to that of the suspected contaminant. A sample of the oil is then introduced into a