
**Animal and vegetable fats and
oils — Determination of insoluble
impurities content**

*Corps gras d'origines animale et végétale — Détermination de la
teneur en impuretés insolubles*



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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 (see 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 (see www.iso.org/patents).

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For an explanation on 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 the following URL: 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*.

This fifth edition cancels and replaces the fourth edition (ISO 663:2007), of which it constitutes a minor revision to exclude fat coming from milk and milk products.

Animal and vegetable fats and oils — Determination of insoluble impurities content

1 Scope

This document specifies a method for the determination of the insoluble impurities content of animal and vegetable fats and oils.

If it is not desired to include soaps (particularly calcium soaps) or oxidized fatty acids in the insoluble impurities content, it is necessary to use a different solvent and procedure. In this case, an agreement is to be reached between the parties concerned.

Milk and milk products (or fat coming from milk and milk products) are excluded from the scope of this document.

2 Normative reference

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:

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

3.1

insoluble impurities content

quantity of dirt and other foreign matter insoluble in *n*-hexane or light petroleum under the conditions specified in this document

Note 1 to entry: The content is expressed as a percentage by mass.

Note 2 to entry: These impurities include mechanical impurities, mineral substances, carbohydrates, nitrogenous substances, various resins, calcium soaps, oxidized fatty acids, fatty acid lactones, and (in part) alkali soaps, hydroxy-fatty acids and their glycerides.

4 Principle

A test portion is treated with an excess of *n*-hexane or light petroleum, then the solution obtained is filtered. The filter and residue are washed with the same solvent, then dried at 103 °C and weighed.

5 Reagents

WARNING — Attention is drawn to the regulations which specify the handling of dangerous substances. Technical, organizational and personal safety measures shall be followed.