
**Animal and vegetable fats and oils —
Determination of refractive index**

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



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative reference	1
3 Terms and definitions	1
4 Principle	1
5 Reagents	2
6 Apparatus	2
7 Sampling	2
8 Preparation of test sample	2
9 Procedure	2
9.1 Calibration of the instrument.....	3
9.2 Determination.....	3
10 Calculation	3
11 Precision	4
11.1 Interlaboratory test.....	4
11.2 Repeatability.....	4
11.3 Reproducibility.....	4
12 Test report	4
Annex A (normative) Results of an interlaboratory test	5
Bibliography	6

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 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 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 6320:2000), of which it constitutes a minor revision by the addition of an exclusion for fat coming from milk and milk products.

Animal and vegetable fats and oils — Determination of refractive index

1 Scope

This document specifies a method for the determination of the refractive index of animal and vegetable fats and oils.

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*

ISO 5725-1, *Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definition*

ISO 5725-2, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

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

refractive index (of a medium)

ratio of the velocity of light of a definite wavelength in a vacuum to its velocity in the medium

Note 1 to entry: In practice, the velocity of light in air is used in place of that in a vacuum and, unless otherwise specified, the selected wavelength is the mean wavelength of the sodium D lines (589,6 nm).

Note 2 to entry: The refractive index of a given substance varies with the wavelength of the incident light and with temperature. The notation used is n_D^t , where t is the temperature in degrees Celsius.

4 Principle

By means of a suitable refractometer, the refractive index of a liquid sample is measured at a specified temperature.