Animal and vegetable fats and oils - Determination of ultraviolet absorbance expressed as specific UV extinction

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 3656:2002 sisaldab Euroopa standardi EN ISO 3656:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 06.08.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 3656:2002 consists of the English text of the European standard EN ISO 3656:2002. This document is endorsed on 06.08.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This International Standard specifies amethod for the determination of the absorbance at ultraviolet wavelengths of animal and vegetable fats and oils.	**Scope:** This International Standard specifies amethod for the determination of the absorbance at ultraviolet wavelengths of animal and vegetable fats and oils.

ICS 67.200.10

Võtmesõnad: absorptance, agricultural products, animal fats, animal oils, determination, fats, food products, oils, testing, tests, ultraviolet radiation, vegetable fats, vegetable oils

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 3656

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ICS 67.200.10

English version

Animal and vegetable fats and oils

Determination of ultraviolet absorbance expressed as specific UV extinction
(ISO 3656 : 2002)

Corps gras d'origines animale et végétale – Détermination de l'absorbance dans l'ultraviolet, exprimée sous la forme d'extinction spécifique en lumière ultraviolette (ISO 3656 : 2002)

Tierische und pflanzliche Fette und Öle – Bestimmung der Ultraviolett-Absorption, ausgedrückt als spezifische UV-Extinktion (ISO 3656 : 2002)

This European Standard was approved by CEN on 2002-03-11.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Ref. No. EN ISO 3656 : 2002 E

Foreword

International Standard

ISO 3656 : 2002 Animal and vegetable fats and oils – Determination of ultraviolet absorbance expressed as specific UV extinction,

which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted 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, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 2002 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 3656 : 2002, was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard specifies a method for the determination of the absorbance at ultraviolet wavelengths of animal and vegetable fats and oils.

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

In a specified ultraviolet wavelength range, the absorbance of a sample in solution is measured spectrometrically. The absorbance at a concentration of 1 g per 100 ml in a 10 mm cell is calculated.

4 Reagent

Use only reagents of recognized analytical grade, unless otherwise stated.

4.1 Solvent: 2,2,4-trimethylpentane (isooctane), having an absorbance less than 0,12 at 230 nm and less than 0,05 at 250 nm against distilled water, measured in a cell of thickness 10 mm.

If 2,2,4-trimethylpentane is not available, cyclohexane or *n*-hexane having the characteristics specified above may be used instead.

5 Apparatus

The glassware used for the determination shall be thoroughly cleaned and rinsed with the solvent (4.1) before use so that it is free from impurities having an absorbance within the wavelength range of 220 nm to 320 nm.

Usual laboratory apparatus and, in particular, the following.

5.1 Spectrometer, preferably having a recording instrument, with quartz cells of thickness 10 mm, suitable for measurements at ultraviolet wavelengths.

Before use it is recommended that the wavelength and absorbance scales of the spectrometer be checked as follows.

a) Wavelength scale

This may be checked using a mercury lamp, in accordance with the instrument manufacturer's instructions. Alternatively a holmium glass plate, which displays sharp absorption peaks at 279,37 nm and 287,5 nm, may be used.