Determination of individual and total sterols contents -Gas chromatographic method - Part 2: Olive and olive n. 28-2. O Problem Concentration of the concentrati pomace oils (ISO 12228-2:2014)



## **EESTI STANDARDI EESSÕNA**

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See Eesti standard EVS-EN ISO 12228-2:2014 sisaldab Euroopa standardi EN ISO 12228-2:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 12228-2:2014 consists of the English text of the European standard EN ISO 12228-2:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
	Date of Availability of the European standard is 15.10.2014.
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## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

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## **English Version**

# Determination of individual and total sterols contents - Gas chromatographic method - Part 2: Olive and olive pomace oils (ISO 12228-2:2014)

Détermination de la teneur en stérols individuels et totaux - Méthode par chromatographie en phase gazeuse - Partie 2: Huile d'olive et huile de grignons d'olive (ISO 12228-2:2014)

Bestimmung der individuellen und der Gesamtsterine -Gaschromatographisches Verfahren - Teil 2: Oliven- und Oliventresteröle (ISO 12228-2:2014)

This European Standard was approved by CEN on 6 September 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## **Foreword**

This document (EN ISO 12228-2:2014) 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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

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 12228:1999.

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.

## **Endorsement notice**

The text of ISO 12228-2:2014 has been approved by CEN as EN ISO 12228-2:2014 without any modification.

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## Determination of individual and total sterols contents — Gas chromatographic method —

## Part 2:

## Olive oils and olive pomace oils

## 1 Scope

This part of ISO 12228 specifies a procedure for the gas chromatographic determination of the contents and composition of sterols and triterpene dialcohols in olive and olive pomace oils. For the determination of the contents and composition of sterols in all other animal and vegetable fats and oils, ISO 12228-1 is to be used.

NOTE This part of ISO 12228 is technically identical to IOC Standard COI/T.20/Doc. No. 30 (November 2011).

## 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

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

#### 3.1

## composition of sterols

composition of individual sterols in the sample, beginning with cholesterol and ending with  $\Delta 7$ -avenasterol (see Table 1) under the conditions specified in this part of ISO 12228

Note 1 to entry: The composition is expressed as a percentage of all peak areas, normalized to 100 %.

### 3.2

## total sterol content

mass fraction of the sum of all individual sterols, as determined in accordance with the method specified in this part of ISO 12228, beginning with cholesterol and ending with  $\Delta 7$ -avenasterol (see <u>Table 1</u>), divided by the mass of the test portion

Note 1 to entry: The content is expressed in milligrams per kilogram.

#### 3.3

## composition of triterpene dialcohols

composition of erythrodiol and uvaol in the sample under the conditions specified in this part of ISO 12228

Note 1 to entry: The composition is expressed as a percentage of all peak areas, beginning with cholesterol and ending with uvaol (see <u>Table 1</u>) under the conditions specified in this part of ISO 12228, normalized to 100 %.