Toiduained. Raskemetallide määramine. Rõhuall mineraliseerimine

Foodsuffs - Determination of trace elements - Pressure digestion

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13805:2002 sisaldab Euroopa standardi EN 13805:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 16.05.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13805:2002 consists of the English text of the European standard EN 13805:2002. This document is endorsed on 16.05.2002 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 European Standard specifies a method for the digestion of foodstuffs under pressure intended for use in the determination of trace elements. This method has been collaboratively tested in combination with atomic absorption (flame, furnace, hydride, cold-vapour) techniques, ICP-MS. ICP-OES and voltametry can be used in combination with the measurement standards, which make reference to this one.	**Scope:** This European Standard specifies a method for the digestion of foodstuffs under pressure intended for use in the determination of trace elements. This method has been collaboratively tested in combination with atomic absorption (flame, furnace, hydride, cold-vapour) techniques, ICP-MS. ICP-OES and voltametry can be used in combination with the measurement standards, which make reference to this one.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13805

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English version

Foodstuffs - Determination of trace elements - Pressure digestion

Produits alimentaires - Détermination des éléments-traces - Digestion sous forte pression

Lebensmittel - Bestimmung von Elementspuren - Druckaufschluss

This European Standard was approved by CEN on 22 February 2002.

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This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

This document (EN 13805:2002) has been prepared by Technical Committee CEN/TC 275 "Food analysis – Horizontal methods", the secretariat of which is held by DIN.

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 September 2002, and conflicting national standards shall be withdrawn at the latest by September 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Annex A is normative.

1 Scope

This European Standard specifies a method for the digestion of foodstuffs under pressure intended for use in the determination of trace elements. This method has been collaboratively tested in combination with atomic absorption (flame, furnace, hydride, cold-vapour) techniques, ICP-MS. ICP-OES and voltametry can be used in combination with the measurement standards, which make reference to this one.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13804, *Foodstuffs — Determination of trace elements — Performance criteria, general considerations and sample preparation.*

3 Principle

Pressure digestion, physicochemical method described in this document for mineralising the sample material and for preparing a test solution containing the trace elements prior to their determination according to the standards that make reference to this one and have been validated in combination with it.

Apparatus with a low level of contamination is used to homogenise the sample, which is then digested in a sealed vessel in a pressure container at high temperature and pressure by conventional or microwave assisted heating [1], [2], [3].

4 Reagents

4.1 General

The concentration of the trace elements in the chemicals and water used shall be low enough not to affect the results of the determination.