

## საქართველოს სტანდარტი

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კვების პროდუქტები-ელემენტებისა და მათი ქიმიური შენაერთების  
განსაზღვრა-ძირითადი ასპექტები და კონკრეტული მოთხოვნები

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2013 წლის 9 სექტემბრის №65 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 13804:2013 „კვების პროდუქტები-ელემენტებისა და მათი ქიმიური შენაერთების განსაზღვრა-ძირითადი ასპექტები და კონკრეტული მოთხოვნები“

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2013 წლის 9 სექტემბერი №268-1.3-5551

წინამდებარე სტანდარტის სრული ან ნაწილობრივი აღწარმოება, ტირაჟირება და გავრცელება საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე არ დაიშვება

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

English Version

## Foodstuffs - Determination of elements and their chemical species - General considerations and specific requirements

Produits alimentaires - Détermination des éléments et de leurs espèces chimiques - Considérations générales et exigences spécifiques

Lebensmittel - Bestimmung von Elementen und ihren Verbindungen - Allgemeines und spezielle Festlegungen

This European Standard was approved by CEN on 12 January 2013.

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 CEN-CENELEC Management Centre or to any CEN member.

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 CEN-CENELEC Management Centre has the same status as the official versions.

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საინფორმაციო ნაწილი. სრული ტექსტის სახსრად შეიძინეთ სტანდარტი.

## Foreword

This document (EN 13804:2013) 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 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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 13804:2002.

Compared to EN 13804:2002, the following changes were made:

- a) the Scope was updated;
- b) former Clause 3, "Terms and definitions" was deleted;
- c) former Clause 4, "Performance characteristics" was deleted;
- d) former Clause 5, "Sampling" was deleted;
- e) former Clause 6, "Sample preparation" was updated and wording is now more precise and appears in the new Clause 2;
- f) Subclause 2.3.2, "Storage for speciation purposes" was added;
- g) Subclause 2.4.2, Table 2 on "Examples of sample preparation procedures for some foodstuffs" was thoroughly updated;
- h) Subclause 2.4.3, "Drying and lyophilisation" was added;
- i) Former Subclause 7.1, "Reagents" was revised and introduced in 3.1;
- j) Former Clause 8, "Laboratory Quality standards" was completely revised and appears now as Clause 4, "Performance requirements and characteristics";
- k) Former Clause 9, "Expression of results" was revised and appears now as Clause 5, "Interpretation and expression of results";
- l) Former Clause 10, "Test report" was specified and appears now as Clause 6;
- m) the Bibliographic references were completed;
- n) the whole document was editorially revised.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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.

## Introduction

The Working Group, CEN/TC 275/WG 10 "Elements and their chemical species", selects and elaborates methods of analysis of elements and their chemical species in foodstuffs.

There are many methods of analysis for the determination of elements in foodstuffs which have been validated and published; the analyst is often required to make a choice between several established methods all of which purport to be applicable to the same analyte/matrix combination. The Working Group decided to establish specific criteria to guide the analyst in the selection between several methods of analysis. As a general rule, analysts should give preference to methods of analysis which comply with the provisions given in Clauses 1 and 2 of the annex to [1], with the Decision in [2] and with the General Principles for Methods of Analysis of the Codex Alimentarius Commission (CAC), as defined in the CAC Procedural Manual and further developed in the "criteria approach" to methods of analysis developed by the Codex Committee of Methods of Analysis and Sampling (CCMAS).

The performance criteria laid down in this European Standard are based on published data or collected from official reports on European interlaboratory studies. When such performance characteristics are not available, the criteria were established based on the experience and opinions of the experts of CEN/TC 275/WG 10.

The criteria included in this European Standard have also been used as guidance in the Working Group 10 for the selection of specific methods of analysis of trace elements to be standardised.

In addition, the Working Group 10 also decided to provide some general information on sample handling and sample preparation, laboratory organisation and equipment.

This document does not deal with sampling issues. It provides an overview of the processes involved from receipt of the laboratory sample to the end result.

General sample preparation procedures are specified, as well as examples for some foodstuffs.

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