

**Fruit and vegetable juices -
Determination of the free amino acids
content - Liquid chromatographic
method**

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amino acids content - Liquid chromatographic
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12742:2001 sisaldab Euroopa standardi EN 12742:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12742:2001 consists of the English text of the European standard EN 12742:1999.</p> <p>This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This standard specifies a chromatographic method for the determination of the free amino acid content in fruit and vegetable juices and related products.</p>	<p>Scope: This standard specifies a chromatographic method for the determination of the free amino acid content in fruit and vegetable juices and related products.</p>
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ICS 67.160.20

Võtmesõnad: amino acids, chemical analysis, chromatographic analysis, determination of content, fruit- and vegetable juices

ICS 67.160.20

Descriptors: Juices, amino acids content, testing.

English version

Fruit and vegetable juices

Determination of the free amino acids content – Liquid chromatographic method

Jus de fruits et de légumes – Dosage des teneurs en acides aminés libres – Méthode par chromatographie en phase liquide

Frucht- und Gemüsesäfte – Bestimmung der Gehalte an freien Aminosäuren – Flüssigchromatographisches Verfahren

This European Standard was approved by CEN on 1999-01-17.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

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CEN

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

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 174 "Fruit and vegetable juices - Methods of 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 August 1999, and conflicting national standards shall be withdrawn at the latest by August 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This draft European Standard specifies a chromatographic procedure for the determination of the free amino acid content in fruit and vegetable juices and related products.

2 Normative references

This draft 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.

EN ISO 3696:1995 Water for analytical laboratory use - Specification and test methods (ISO 3696 : 1987)

3 Symbols

For the purpose of this draft European Standard, the following symbols apply :

- c substance concentration ;
- ρ mass concentration ;
- g acceleration due to gravity at the surface of the earth (9,81 m/s²).

4 Principle

Amino acids are separated on a cation exchange chromatography column by stepwise elution with a range of lithium citrate buffers of different molarities and pH-values. After a colour reaction, with ninhydrin, the amino acids are quantified photometrically at a wavelength of 570 nm (or 440 nm for proline).

5 Reagents

5.1 General

Use only reagents of recognized analytical grade and only water in accordance with at least grade 1 of EN ISO 3696:1995.