

**Piim ja piimapulber. Aflatoksiini M1
sisalduse määramine. Puhastamine
immunoafiinsuskromatograafia ja
määramine kõrgefektiivse
vedelikkromatograafia abil**

Milk and milk powder - Determination of aflatoxin M1
content - Clean-up by immunoaffinity
chromatography and determination by high-
performance liquid chromatography

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN ISO 14501:2000 sisaldab Euroopa standardi EN ISO 14501:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN ISO 14501:2000 consists of the English text of the European standard EN ISO 14501:1998.</p> <p>This document is endorsed on 18.08.2000 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: See standard määrab kindlaks meetodi aflatoksiini M1 sisalduse määramiseks piimas ja piimapulbris.</p> | <p>Scope:</p> |
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ICS 67.100.10

Võtmesõnad: aflatoksiinid, keemiline analüüs, kõrgefektiivne vedelik kromatograafia, piim, piimapulber, piimatooted, põllumajandustooted, sisalduse määramine, toiduainetooted

ICS 67.100.10

Descriptors: Milk, aflatoxin content, testing.

English version

**Milk and milk powder –
Determination of aflatoxin M₁ content**

Clean-up by immunoaffinity chromatography and determination by
high-performance liquid chromatography
(ISO 14501 : 1998)

Lait et lait en poudre – Détermination
de la teneur en aflatoxine M₁ –
Purification par chromatographie
d'immunoaffinité et détermination par
chromatographie en phase liquide à
haute performance (ISO 14501 : 1998)

Milch und Milchpulver – Bestimmung
des Gehalts an Aflatoxin M₁ – Reini-
gung durch Immunoaffinitäts-
chromatographie und Bestimmung
mit Hochleistungsflüssig-
chromatographie (ISO 14501 : 1998)

This European Standard was approved by CEN on 1998-11-15.

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 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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 14501 : 1998 Milk and milk powder – Determination of aflatoxin M₁ content – Clean-up by immunoaffinity chromatography and determination by high-performance liquid chromatography,

which was prepared by ISO/TC 34 'Agricultural food products' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 302 'Milk and milk products', the Secretariat of which is held by NNI, 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 May 1999 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, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 14501 : 1998 was approved by CEN as a European Standard without any modification.

WARNINGS

1 The method described in this International Standard requires the use of chloroform and aflatoxin M₁ solutions. Chloroform is an ozone-depleting substance. Aflatoxins are carcinogenic to human subjects. Attention is drawn to the statement made by the International Agency for Research on Cancer (WHO) [4, 5].

2 Adequately protect from daylight the laboratory where the analyses are performed, and keep aflatoxin standard solutions protected from light, for example by using aluminium foil.

3 The use of non-acid-washed glassware (e.g. tubes, vials, flasks, beakers, syringes) for aqueous aflatoxin solutions may cause loss of aflatoxin. Moreover, brand new laboratory glassware coming into contact with aqueous solutions of aflatoxin should be soaked in dilute acid (e.g. sulfuric acid, 2 mol/l) for several hours, then rinsed well with distilled water to remove all traces of acid (check to ensure pH is in the range 6 to 8).

4 Use a decontamination procedure for laboratory wastes such as solid compounds, solutions in organic solvents, glassware, aqueous solutions and spills. The procedure for decontamination was developed and validated in a programme of the International Agency for Research on Cancer (WHO) [4, 5].

1 Scope

This International Standard specifies a method for the determination of aflatoxin M₁ content of milk and milk powder. The lowest level of validation is 0,08 µg/kg for whole milk powder i.e. 0,008 µg/l for reconstituted liquid milk. The method is also applicable to low fat milk, skimmed milk, low fat milk powder and skimmed milk powder.

2 Term and definition

For the purposes of this International Standard, the following term and definition apply.

2.1

aflatoxin M₁ content

mass fraction of substances determined by the procedure specified in this International Standard

NOTE The aflatoxin M₁ content is expressed as micrograms per litre or micrograms per kilogram.