

**Milk - Determination of nitrogen content
- Part 2: Block-digestion method (Macro
method)**

Milk - Determination of nitrogen content - Part 2:
Block-digestion method (Macro method)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8968-2:2002 sisaldab Euroopa standardi EN ISO 8968-2:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.05.2002 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 8968-2:2002 consists of the English text of the European standard EN ISO 8968-2:2001.</p> <p>This document is endorsed on 16.05.2002 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:</p> <p>This part of EN ISO 8968/IDF 20 specifies a method for the determination of the nitrogen content of liquid milk, whole or skimmed, by the block-digestion principle.</p>	<p>Scope:</p> <p>This part of EN ISO 8968/IDF 20 specifies a method for the determination of the nitrogen content of liquid milk, whole or skimmed, by the block-digestion principle.</p>
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Võtmesõnad: chemical analysis and testin, crude proteins, dairy analysis, definition, definitions, determination of content, food inspection, food products, foodstuff, laboratory tests, milk, milk products, nitrogen, proteins, sampling, sampling methods, testing, titration

English version

Milk – Determination of nitrogen content

Part 2: Block-digestion method (Macro method)
(ISO 8968-2 : 2001)

Lait – Détermination de la teneur
en azote – Partie 2: Méthode de
minéralisation en bloc (Méthode
macro) (ISO 8968-2 : 2001)

Milch – Bestimmung des
Stickstoffgehaltes –
Teil 2: Blockaufschluss-Verfahren
(Makroverfahren) (ISO 8968-2 : 2001)

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

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Foreword

International Standard

ISO 8968-2 : 2001 Milk – Determination of nitrogen content – Part 2: Block-digestion method (Macro method), 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 – Methods of sampling and analysis', the Secretariat of which is held by NEN, 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 June 2002 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 8968-2 : 2001 was approved by CEN as a European Standard without any modification.

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WARNING — The use of this part of ISO 8968|IDF 20 may involve the use of hazardous materials, operations, and equipment. This standard does not purport to address all the safety risks associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and healthy practices and determine the applicability of local regulatory limitations prior to use.

1 Scope

This part of ISO 8968|IDF 20 specifies a method for the determination of the nitrogen content of liquid milk, whole or skimmed, by the block-digestion principle.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 8968|IDF 20. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 8968|IDF 20 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 385-1, *Laboratory glassware — Burettes — Part 1: General requirements*

3 Term and definition

For the purposes of this part of ISO 8968|IDF 20, the following term and definition apply.

3.1

nitrogen content

mass fraction of substances determined by the procedure specified in this part of ISO 8968|IDF 20

NOTE The nitrogen content is expressed as a percentage by mass.

4 Principle

A test portion is digested by using a block-digestion apparatus with a mixture of concentrated sulfuric acid and potassium sulfate, using copper(II) sulfate as a catalyst to thereby convert organic nitrogen present to ammonium sulfate. The function of the potassium sulfate is to elevate the boiling point of the sulfuric acid and to provide a stronger oxidizing environment. Excess sodium hydroxide is added to the cooled digest to liberate ammonia. The liberated ammonia is steam distilled, using either a manual or semi-automatic steam distillation unit, into an excess of boric acid solution then titrated with hydrochloric acid. The nitrogen content is calculated from the amount of ammonia produced.