

PIIM

Rasvasisalduse määramine

Butüromeetiline meetod (Gerber)

Milk

Determination of fat content

Acido-butyrometric (Gerber method)

(ISO 19662:2018, identical)

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-ISO 19662:2023 sisaldab rahvusvahelise standardi ISO 19662:2018 „Milk. Determination of fat content. Acido-butyrometric (Gerber method)“ identset ingliskeelset teksti.	This Estonian Standard EVS-ISO 19662:2023 consists of the identical English text of the International Standard ISO 19662:2023 „Milk. Determination of fat content. Acido-butyrometric (Gerber method)“.
Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 1, standardi avaldamist on korraldanud Eesti Standardimis- ja Akrediteerimiskeskus.	Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 1, the Estonian Standard has been published by the Estonian Centre for Standardisation and Accreditation.
Standard EVS-ISO 19662:2023 on jõustunud sellekohase teate avaldamisega EVS Teatajas.	Standard EVS-ISO 19662:2023 has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	This standard is available from the Estonian Centre for Standardisation and Accreditation.

Käsitlusala

Selles dokumendis kirjeldatakse butüromeetrilist meetodit (Gerberi meetodit) rasvasisalduse määramiseks piimas. See on rakendatav täispiimale ja osaliselt kooritud piimale.

See on samuti rakendatav ametlikult lubatud konservante (kaaliumdikromaati, bronopooli) sisaldavale piimale.

See ei ole kohaldatav formaliini sisaldavale piimale ega homogeniseerimistöötuse läbinud piimale.

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ICS 67.100.01

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products* and the International Dairy Federation (IDF). It is being published jointly by ISO and IDF.

IDF (the International Dairy Federation) is a non-profit private sector organization representing the interests of various stakeholders in dairying at the global level. IDF members are organized in National Committees, which are national associations composed of representatives of dairy-related national interest groups including dairy farmers, dairy processing industry, dairy suppliers, academics and governments/food control authorities.

ISO and IDF collaborate closely on all matters of standardization relating to methods of analysis and sampling for milk and milk products. Since 2001, ISO and IDF jointly publish their International Standards using the logos and reference numbers of both organizations.

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This document was prepared by the IDF Standing Committee on Analytical Methods for Composition and ISO Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*. It is being published jointly by ISO and IDF.

All work was carried out by the ISO/IDF Project Group C21 of the Standing Committee on Analytical Methods for Composition under the aegis of its project leader, Mr Philippe Trossat (FR).

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Milk — Determination of fat content — Acido-butyrometric (Gerber method)

1 Scope

This document specifies a method, the acido-butyrometric or “Gerber”, for determining the fat content of milk. It is applicable to whole milk and partially skimmed milk.

It is also applicable to milk containing authorized preservatives (potassium dichromate, bronopol).

It does not apply to formalin milk, nor to milks that have undergone a homogenisation treatment.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

acido-butyrometric method

traditional technique which, when applied to a whole milk having a fat content between 3 g and 5 g per 100 ml or 100 g, gives a fat content that is equivalent, after correction by the density at 20 °C, to that obtained by the gravimetric reference method

4 Principle

Dissolution of the proteins by the addition of sulfuric acid, followed by separation of the milk's fat by centrifuging in a butyrometer. The separation is assisted by the addition of amyl alcohol.

Determination of the fat content in grams per 100 ml or 100 g of milk by direct reading on the butyrometer scale.

5 Reagents

All reagents shall be of recognised analytical grade and the water used shall be distilled water or water of at least equivalent purity.

5.1 Concentrated sulfuric acid, density $\rho_{20} = 1,820 \text{ g/ml} \pm 0,005 \text{ g/ml}$, colourless or barely amber, free from any impurity that may influence the result.