Milk - Determination of freezing point - Thermistor cryoscope method (Reference method)

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 5764:2009 sisaldab Euroopa standardi EN ISO 5764:2009 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 5764:2009 consists of the English text of the European standard EN ISO 5764:2009.
Standard on kinnitatud Eesti Standardikeskuse 29.05.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 29.05.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.05.2009.	Date of Availability of the European standard text 01.05.2009.
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Võtmesõnad: agricultural products, congealing point, cryoscopes, dairy products, determination, food products, freezing point, measurement, milk, samples, solidification point, testing, tests, thermistors

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English Version

Milk - Determination of freezing point - Thermistor cryoscope method (Reference method) (ISO 5764:2009)

Lait - Détermination du point de congélation - Méthode au cryoscope à thermistance (Méthode de référence) (ISO 5764:2009)

Milch - Bestimmung des Gefrierpunktes - Thermistor-Kryoskop-Verfahren (Referenzverfahren) (ISO 5764:2009)

This European Standard was approved by CEN on 13 April 2009.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 5764:2009) has been prepared by Technical Committee ISO/TC 34 "Agricultural food products" in collaboration with Technical Committee CEN/TC 302 “Milk and milk products - Methods of sampling and analysis” the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

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Endorsement notice

The text of ISO 5764:2009 has been approved by CEN as a EN ISO 5764:2009 without any modification.

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1 Scope

This International Standard specifies a reference method for the determination of the freezing point of raw bovine milk, heat-treated whole, reduced fat and skimmed bovine milk, as well as raw ovine and caprine milk, by using a thermistor cryoscope.

The freezing point can be used to estimate the proportion of extraneous water in milk. Calculation of the amount of extraneous water is subject to daily and seasonal variations, and is not within the scope of this International Standard.

Results obtained from samples with a titratable acidity exceeding 20 ml of 0,1 mol/l sodium hydroxide solution per 10 g of non-fat solids are not representative of the original milk.

NOTE 1 Sterilization and vacuum pasteurization can affect the freezing point of milk (see Reference [5]).

NOTE 2 The method uses plateau-timed instruments. For routine measurements, other thermistor cryoscope methods, i.e. fixed time procedures, can be used. Guidelines for the application of other procedures are given in Annex C.

NOTE 3 The limit value mentioned for the titratable acidity in Clause 1 and 9.2 applies to bovine milk. It is possible that the limit values for ovine and caprine milk are higher.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 6091, *Dried milk — Determination of titratable acidity (Reference method)* [1)]