



**SLOVENSKI STANDARD**  
**oSIST ISO/DIS 22935-3:2023**

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**Mleko in mlečni proizvodi - Senzorična analiza - 3. del: Smernice za metodo ocenjevanja skladnosti proizvoda s specifikacijami za senzorične lastnosti s točkovanjem**

Milk and milk products — Sensory analysis — Part 3: Guidance on a method for evaluation of compliance with product specifications for sensory properties by scoring

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Lait et produits laitiers — Analyse sensorielle — Partie 3: Lignes directrices pour une méthode d'évaluation de la conformité aux spécifications de produit pour les propriétés sensorielles par notation

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## Milk and milk products — Sensory analysis —

### Part 3:

## Guidance on a method for evaluation of compliance with product specifications for sensory properties by scoring

*Lait et produits laitiers — Analyse sensorielle —**Partie 3: Lignes directrices pour une méthode d'évaluation de la conformité aux spécifications de produit pour les propriétés sensorielles par notation*

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## Foreword

**ISO (the International Organization for Standardization)** is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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.

This second edition cancels and replaces the first edition (ISO 22935-3|IDF 99-3:2009), which has been technically revised.

The main changes compared to the previous edition are as follows:

- Some corrections in Normative references
- Some editorial changes in text
- Procedures are adjusted to the new ISO 20613, *Sensory Analysis – general guidance for the application of sensory analysis in quality control (2019)*. There is now also opening for variation in scale definitions, not only the 1-5 point scale.

A list of all parts in the ISO 22935 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

**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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The work was carried out by the IDF/ISO Action Team S17 of the *Standing Committee on Statistics and Automation* under the aegis of its project leader Dr H. Kraggerud (NO).

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## Introduction

The purpose of ISO 22935|IDF 99 (all parts) is to give guidance on methodology for sensory analysis and the use of a common nomenclature of terms for milk and milk products.

ISO 22935|IDF 99 is divided into three parts.

ISO 6658 should be consulted for an overview of sensory methods other than the one provided in ISO 22935-3|IDF 99-3.

Evaluation of labelling and packaging is not covered by ISO 22935|IDF 99 (all parts).

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# Milk and milk products — Sensory analysis —

## Part 3:

# Guidance on a method for evaluation of compliance with product specifications for sensory properties by scoring

## 1 Scope

This part of ISO 22935 | IDF 99 gives guidance on a general method for evaluation of compliance with product specifications for sensory properties based on sensory scoring and the use of a common nomenclature of terms.

The method is especially applicable in process and quality control performed regularly on a larger number of samples and/or with some time pressure and/or with a limited number of expert assessors available.

The results from the method may be part of product classification systems for domestic and international trade. Classification systems are not covered by this part of ISO 22935|IDF 99.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4121, *Sensory analysis — Guidelines for the use of quantitative response scales*

ISO 5492, *Sensory analysis — Vocabulary*

ISO 5496, *Sensory analysis — Methodology — Initiation and training of assessors in the detection and recognition of odours*

ISO 6658, *Sensory analysis — Methodology — General guidance*

ISO 8586, *Sensory analysis — General guidelines for the selection, training and monitoring of selected assessors and expert sensory assessors*

ISO 8589, *Sensory analysis — General guidance for the design of test rooms*

ISO 13300-1, *Sensory analysis — General guidance for the staff of a sensory evaluation laboratory — Part 1: Staff responsibilities*

ISO 13300-2, *Sensory analysis — General guidance for the staff of a sensory evaluation laboratory — Part 2: Recruitment and training of panel leaders*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 22935-1, |IDF 99-1, *Milk and milk products — Sensory analysis — General guidance for the recruitment, selection, training and monitoring of assessors*

ISO 22935-2, |IDF 99-2, *Milk and milk products — Sensory analysis — Recommended methods for sensory evaluation*

ISO 20613, *Sensory analysis — General guidance for the application of sensory analysis in quality control*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4121, ISO 5492, ISO 5496, ISO 6658, ISO 8586, ISO 8589, ISO 22935-1|IDF 99-1 and the following apply.

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

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

#### 3.1

##### **property**

(sensory analysis of milk products) overall appearance, consistency or odour/flavour of a sample

### 4 Principle

Sensory properties of individual samples of milk and milk products are analysed under standardized conditions by a panel of expert milk and milk product assessors. Each assessor evaluates the samples independently of the other assessors and uses a defined scale to estimate the magnitude of a possible deviation in a product from a pre-established sensory product specification. When assessors score a significant difference, then the score is supplemented by common terms which describe the character of the sensory deviation. The mean values of the panel, supplemented with the representative terms, gives the result of the method.

### 5 General test requirements

#### 5.1 General

The method shall be used in conjunction with ISO 22935-1|IDF 99-1 and ISO 22935-2|IDF 99-2. Follow also the general guidance on the methodology of sensory analysis given in ISO 6658. When relevant, it is also recommended that the general requirements for the competence to carry out tests given in ISO/IEC 17025 with supplemental documents specific for sensory testing laboratories (such as EA-4/09 [5]) be followed.

#### 5.2 Test room

Conduct the sensory analysis in a special test room with standardized conditions which are monitored regularly when testing. See ISO 22935-2|IDF 99-2 and ISO 8589 for the characteristics of the room in which the tests are to be performed.

#### 5.3 Assessors

Assessors shall be recruited, selected, trained and monitored to satisfy the criteria for expert milk and milk product assessors. See ISO 22935-1|IDF 99-1, ISO 8586, and ISO 5496 for general guidance.

#### 5.4 Panel

The number of assessors in the panel shall be at least three. See also ISO 22935-1|IDF 99-1 for additional requirements for assessors in the panel and ISO 22935-2|IDF 99-2 for general guidelines for the preparation of a panel.

#### 5.5 Panel leader

A panel leader familiar with sensory evaluation of the products shall be responsible for the entire procedure and shall normally not participate in the panel. The panel leader may, however, be a panel member in regular process or quality control situations (e.g. at processing dairy plants), if the