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Cereals - Determination of bulk density, called mass per hectolitre - Part 3: Routine method (ISO 7971-3:2019)

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ICS 67.060

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 7971-3

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Supersedes EN ISO 7971-3:2009

English Version

Cereals - Determination of bulk density, called mass per hectolitre - Part 3: Routine method (ISO 7971-3:2019)

Céréales - Détermination de la masse volumique, dite masse à l'hectolitre - Partie 3: Méthode pratique (ISO 7971-3:2019)

Getreide - Bestimmung der Schüttdichte, sogenannte Masse je Hektoliter - Teil 3: Routineverfahren (ISO 7971-3:2019)

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European foreword

This document (EN ISO 7971-3:2019) has been prepared by Technical Committee ISO/TC 34 "Food products" in collaboration with Technical Committee CEN/TC 338 “Cereal and cereal products” the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7971-3:2009.

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Endorsement notice

The text of ISO 7971-3:2019 has been approved by CEN as EN ISO 7971-3:2019 without any modification.

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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).

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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.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 4, *Cereals and pulses*.

The second edition cancels and replaces the first edition (ISO 7971-3:2009), which has been technically revised. The main changes compared with the previous edition are as follows:

— a formulae has been introduced to express the results obtained with NILEMA LITRE for wheat and barley.

A list of all parts in the ISO 7971 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.

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Cereals — Determination of bulk density, called mass per hectolitre —

Part 3: Routine method

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1 Scope

This document specifies a routine method for the determination of bulk density, called "mass per hectolitre", of cereals as grain using manual or automatic, mechanical, electric or electronic mass per hectolitre measuring instruments.

NOTE Further details of the measuring instruments are specified in ISO 7971-2:2019, 6.4.

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 7971-2:2019, *Cereals — Determination of bulk density, called mass per hectolitre — Part 2: Method of traceability for measuring instruments through reference to the international standard instrument*

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:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
mass per hectolitre
bulk density
test weight
<cereals> ratio of the mass of a cereal to the volume it occupies after being poured into a container under defined manufacturer's conditions

Note 1 to entry: Mass per hectolitre is expressed in kilograms per hectolitre of grains as received.

Note 2 to entry: Mass per hectolitre, as defined in this document, is different from "packing density" or "intrinsic density" of cereals.

[SOURCE: ISO 7971-1:2009, 2.1, modified — In the definition, "defined manufacturer's conditions" has replaced "well-defined conditions".]

4 Principle

The mass per hectolitre of a cereal is obtained from the mass of a volume of cereal determined under controlled sample filling and flow conditions.

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