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BS EN ISO 5530-2:2014



BSI Standards Publication

Wheat flour — Physical characteristics of doughs

Part 2: Determination of rheological properties using an extensograph

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This British Standard is the UK implementation of EN ISO 5530-2:2014. It is identical to ISO 5530-2:2012.

The UK participation in its preparation was entrusted to Technical Committee AW/4, Cereals and pulses.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Date	Text affected
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English Version

Wheat flour - Physical characteristics of doughs - Part 2: Determination of rheological properties using an extensograph (ISO 5530-2:2012)

Farines de blé tendre - Caractéristiques physiques des pâtes - Partie 2: Détermination des caractéristiques rhéologiques au moyen de l'extensographe (ISO 5530-2:2012)

Weizenmehl - Physikalische Eigenschaften von Teigen - Teil 2: Bestimmung der rheologischen Eigenschaften mittels Extensograph (ISO 5530-2:2012)

This European Standard was approved by CEN on 16 December 2014.

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Foreword

The text of ISO 5530-2:2012 has been prepared by Technical Committee ISO/TC 34 "Food products" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5530-2:2014 by 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of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 5530-2:2012 has been approved by CEN as EN ISO 5530-2:2014 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 5530-2 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 4, *Cereals and pulses*.

This third edition cancels and replaces the second edition (ISO 5530-2:1997), which has been technically revised.

ISO 5530 consists of the following parts, under the general title *Wheat flour — Physical characteristics of doughs*:

- *Part 1: Determination of water absorption and rheological properties using a farinograph*
- *Part 2: Determination of rheological properties using an extensograph*
- *Part 3: Determination of water absorption and rheological properties using a valorigraph*

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Wheat flour — Physical characteristics of doughs —

Part 2:

Determination of rheological properties using an extensograph

1 Scope

This part of ISO 5530 specifies a method, using an extensograph, for the determination of the rheological properties of wheat flour dough in an extension test. The recorded load–extension curve is used to assess general quality of flour and its response to improving agents.

The method is applicable to experimental and commercial flours from wheat (*Triticum aestivum* L.).

NOTE This part of ISO 5530 is based on ICC 114.^[3]

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 712, *Cereals and cereal products — Determination of moisture content — Reference method*

ISO 5530-1:—,¹⁾ *Wheat flour — Physical characteristics of doughs — Part 1: Determination of water absorption and rheological properties using a farinograph*

3 Terms and definitions

For the purposes of this part of ISO 5530, the following terms and definitions apply.

3.1

energy

capacity to do work

NOTE 1 For the purposes of this part of ISO 5530, the energy is determined as the area under a recorded curve. The energy describes the work applied when stretching a dough sample.

NOTE 2 The area is measured by a planimeter and reported in square centimetres.

3.2

extensibility

E

distance travelled by the recorder paper from the moment that the hook touches the test piece until rupture of (one of the strings of) the test piece

NOTE See 9.4 and Figure 1.

3.3

extensograph water absorption

volume of water required to produce a dough with a consistency of 500 farinograph units (FU) after 5 min mixing, under specified operating conditions

NOTE Extensograph water absorption is expressed in millilitres per 100 g of flour at 14,0 % mass fraction moisture content.

1) To be published. (Revision of ISO 5530-1:1997)