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



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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)

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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of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by June 2015.

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Endorsement notice

a oved by 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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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

Е

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

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