



# SLOVENSKI STANDARD

## SIST EN ISO 17715:2015

01-februar-2015

---

**Pšenična moka (*Triticum aestivum* L.) - Amperometrijska metoda za merjenje poškodbe škroba (ISO 17715:2013)**

Flour from wheat (*Triticum aestivum* L.) - Amperometric method for starch damage measurement (ISO 17715:2013)

Weizenmehl (*Triticum aestivum* L.) - Messung der Stärkebeschädigung mittels amperometrischer Methode (ISO 17715:2013)

Farine de blé tendre (*Triticum aestivum* L.) - Méthode ampérométrique pour le mesurage de l'endommagement de l'amidon (ISO 17715:2013)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

**Ta slovenski standard je istoveten z: EN ISO 17715:2014**

---

**ICS:**

67.060	Žita, stročnice in proizvodi iz njih	Cereals, pulses and derived products
--------	--------------------------------------	--------------------------------------

**SIST EN ISO 17715:2015**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17715:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

EUROPEAN STANDARD

EN ISO 17715

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2014

ICS 67.060

English Version

## Flour from wheat (*Triticum aestivum* L.) - Amperometric method for starch damage measurement (ISO 17715:2013)

Farine de blé tendre (*Triticum aestivum* L.) - Méthode  
ampérométrique pour le mesurage de l'endommagement  
de l'amidon (ISO 17715:2013)

Weizenmehl (*Triticum aestivum* L.) - Messung der  
Stärkebeschädigung mittels amperometrischer Methode  
(ISO 17715:2013)

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

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword.....	2

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17715:2015](https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015)  
<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

## Foreword

The text of ISO 17715:2013 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 17715:2014 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 17715:2013 has been approved by CEN as EN ISO 17715:2014 without any modification.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17715:2015](https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17715:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

INTERNATIONAL  
STANDARD

ISO  
17715

First edition  
2013-02-01

---

---

**Flour from wheat (*Triticum aestivum*  
L.) — Amperometric method for  
starch damage measurement**

*Farine de blé tendre (Triticum aestivum L.) — Méthode  
ampérométrique pour le mesurage de l'endommagement de l'amidon*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 17715:2015](https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>



Reference number  
ISO 17715:2013(E)

© ISO 2013

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN ISO 17715:2015

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland



<b>Contents</b>		Page
<b>Foreword</b> .....		<b>iv</b>
<b>Introduction</b> .....		<b>v</b>
<b>1 Scope</b> .....		<b>1</b>
<b>2 Terms and definitions</b> .....		<b>1</b>
<b>3 Principle</b> .....		<b>1</b>
<b>4 Reagents</b> .....		<b>1</b>
<b>5 Equipment</b> .....		<b>2</b>
<b>6 Sampling</b> .....		<b>2</b>
<b>7 Procedure</b> .....		<b>2</b>
7.1 Reagent weighing and dissolution.....		<b>2</b>
7.2 Sample weighing.....		<b>2</b>
7.3 Test.....		<b>2</b>
7.4 Cleaning.....		<b>3</b>
7.5 Number of determinations.....		<b>3</b>
<b>8 Expression of results</b> .....		<b>3</b>
<b>9 Precision</b> .....		<b>3</b>
9.1 Interlaboratory tests.....		<b>3</b>
9.2 Repeatability limits, $r$ .....		<b>3</b>
9.3 Reproducibility limits, $R$ .....		<b>4</b>
9.4 Critical difference, $d_C$ .....		<b>4</b>
9.5 Uncertainty, $u$ .....		<b>5</b>
<b>10 Test report</b> .....		<b>5</b>
<b>Annex A (informative) Data from interlaboratory tests on wheat flour</b> .....		<b>6</b>
<b>Bibliography</b> .....		<b>13</b>

**ISO 17715:2013(E)****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 17715 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 4, *Cereals and pulses*.

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[SIST EN ISO 17715:2015](https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>

## Introduction

Damaged starch content is an important parameter in flour quality as it directly impacts the flour water absorption capacity and therefore its use in the agri-food industry.

In the past, a number of methods based on various principles were developed to estimate such content, but comparing the results is difficult due to the different principles and units of measurement used.

A laboratory device is dedicated to the determination of damaged starch content using an amperometric method and which offers a choice of units of measurement according to individual references.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 17715:2015](https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015)

<https://standards.iteh.ai/catalog/standards/sist/567481e8-4364-49c0-bcd9-649bc23cfe5/sist-en-iso-17715-2015>