

---

---

**Pulses — Determination of moisture  
content — Air-oven method**

*Légumineuses — Détermination de la teneur en eau — Méthode  
par séchage à l'étuve*



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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

## 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 24557 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 4, *Cereals and pulses*.

This document is a preview generated by EVS

# Pulses — Determination of moisture content — Air-oven method

## 1 Scope

This International Standard specifies a routine reference method for the determination of moisture content of pulses. The procedure is applicable to chickpeas, lentils, peas, and all classes of beans with the exception of soybeans.

NOTE The method is based on AACC approved method 44-17<sup>[4]</sup>.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1

#### moisture content

loss of mass fraction undergone by the product under the conditions specified in this International Standard

NOTE The moisture content is expressed as a percentage mass fraction.

## 3 Principle

The method determines moisture content as the loss of mass fraction, expressed as a percentage, of a sample when heated under specified conditions. A preconditioning stage is used to minimize moisture loss during the grinding stage.

## 4 Apparatus

**4.1 Laboratory mill<sup>1)</sup>**, capable of grinding without undue exposure to atmosphere and without appreciable heating. The mill shall be able to grind large-seeded pulses, such as beans.

Required particle size,  $d$ , after grinding:

$d < 0,5$  mm: more than 20 % mass fraction;

$d < 1,0$  mm: 70 % mass fraction;

$d < 1,7$  mm: 100 % mass fraction.

NOTE Grinders operating at speeds higher than 3 600 r/min are unsatisfactory due to excessive moisture loss during grinding, which results in moisture values lower than actual.

---

1) The Thomas Wiley model ED5 with a 1 mm sieve (1 260 r/min) and the laboratory mill 3303 produced by Perten Instruments, with settings 0 to 4 (3 600 r/min), are examples of suitable devices available commercially. This information is given for the convenience of users of this International Standard and does not constitute an endorsement by ISO of these products. Other equipment may be used if it can be shown to give comparable results.