INTERNATIONAL STANDARD

ISO 24557

First edition
2009-10-01

Pulses — Determination of moisture content — Air-oven method

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

Reference number
ISO 24557:2009(E)

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Published in Switzerland

Foreword

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

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[4].

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[1)], 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.