

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

Revision

ISO RECOMMENDATION R 1446

GREEN COFFEE BEANS

DETERMINATION OF MOISTURE CONTENT
(BASIC REFERENCE METHOD)

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 1446, *Green coffee beans – Determination of moisture content (Basic reference method)*, was drawn up by Technical Committee ISO/TC 34, *Agricultural food products*, the Secretariat of which is held by the Magyar Szabványügyi Hivatal (MSZH).

Work on this question led to the adoption of Draft ISO Recommendation No. 1446, which was circulated to all the ISO Member Bodies for enquiry in February 1968. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Brazil	Iran	Romania
Chile	Israel	South Africa, Rep. of
Czechoslovakia	Netherlands	Spain
France	Norway	Turkey
Hungary	Poland	United Kingdom
India	Portugal	U.S.S.R.

The following Member Bodies opposed the approval of the Draft :

Colombia
U.S.A.

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

GREEN COFFEE BEANS

DETERMINATION OF MOISTURE CONTENT

(BASIC REFERENCE METHOD)

1. SCOPE

This ISO Recommendation describes the basic reference method for the determination of the moisture content of green coffee beans.

NOTE. This method is designed to serve as a standard for the checking and perfecting of methods particularly suitable for the routine determination of moisture in green coffee beans.

2. DEFINITION

By "moisture" of green coffee is meant the loss in mass undergone by the coffee when it is brought to true equilibrium with an atmosphere having a zero water vapour pressure, under conditions such that interfering reactions are avoided.

In the present state of knowledge, it is considered that this loss in mass corresponds to the actual moisture in green coffee beans.

The moisture content is expressed as a percentage by mass.

3. PRINCIPLE

Determination of the loss in mass when the product, previously ground without alteration of its moisture content, is brought into equilibrium with an anhydrous atmosphere at a temperature of 48 ± 2 °C, at a pressure of 20 ± 7 mbar.*

Pre-drying of beans which are too moist.

4. APPARATUS

4.1 *Suction device* permitting a pressure of 20 ± 7 mbar to be obtained (for example, a water pump).

4.2 *Grinder*, made of material which does not absorb moisture, and which

- is easy to clean and has a minimum dead space;
- permits rapid and even grinding without producing appreciable heating and, as far as possible, without contact with outside air;
- can be regulated so as to obtain a ground product of which more than 90 % of the grains have a diameter of less than 1 mm and more than 50 % have a diameter of less than 0.5 mm.

4.3 *Metal dish*, non-corrodible, with a sufficiently tight-fitting lid, the effective surface enabling the test portion to be distributed so as to give not more than 0.3 g/cm^2 .**

4.4 *Glass or porcelain boat* containing reagent-grade phosphorus pentoxide. The effective surface should if possible be at least equal to that of the metal dish (4.3).

* i.e. approximately 10 to 20 mmHg.

** See diagram of a metal dish, for information only, in Annex A.