
INTERNATIONAL STANDARD



1442

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Meat and meat products — Determination of moisture content

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 1442 replaces ISO Recommendation R 1442:1970 drawn up by Technical Committee ISO/TC 34, *Agricultural food products*.

The Member Bodies of the following countries approved the Recommendation :

Australia	Iran	South Africa, Rep. of
Chile	Israel	Spain
Czechoslovakia	Korea, Rep. of	Thailand
Egypt, Arab Rep. of	Netherlands	Turkey
France	New Zealand	United Kingdom
Germany	Poland	U.S.S.R.
Hungary	Portugal	
India	Romania	

No Member Body expressed disapproval of the Recommendation.

Meat and meat products – Determination of moisture content

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a reference method for the determination of the moisture content of meat and meat products.

2 REFERENCE

ISO ..., *Meat and meat products – Sampling*.¹⁾

3 DEFINITION

moisture of meat and meat products: The loss in mass obtained under the operating conditions described.

The moisture content is expressed as a percentage by mass.

4 PRINCIPLE

Thorough mixing of the test portion with sand and ethanol, pre-drying of the mixture on a water bath, and drying to constant mass at $103 \pm 2^\circ\text{C}$.

5 REAGENTS

5.1 Sand. Use the fraction of the sand which passes through a sieve of aperture width 1,4 mm and stays on a sieve of aperture width 250 μm .

Wash the sand with running water. Boil the sand with dilute hydrochloric acid, $\rho_{20} = 1,19 \text{ g/ml}$, diluted (1 + 1), for 30 min while stirring continuously. Repeat this with another portion of the acid until the acid no longer turns yellow after boiling.

Then wash the sand with distilled water until the test for chloride is negative. Dry the sand at 150 to 160°C and store in an airtight closed bottle.

5.2 Ethanol, at least 95 % (V/V).

6 APPARATUS

6.1 Mechanical meat mincer, laboratory size, fitted with a plate with holes of diameter not exceeding 4 mm.

6.2 Dish, flat, of porcelain or metal (for example, nickel, aluminium, stainless steel), diameter at least 60 mm, height about 25 mm.

6.3 Thin glass rod, flattened at one end, slightly longer than the diameter of the dish.

6.4 Drying oven, electrically heated, capable of being controlled at $103 \pm 2^\circ\text{C}$.

6.5 Water bath.

6.6 Desiccator, containing an efficient desiccant.

6.7 Analytical balance.

7 SAMPLE

7.1 Start from a representative sample of at least 200 g taken according to ISO

7.2 Store the sample in such a way that deterioration and change in composition are prevented.

8 PROCEDURE

8.1 Preparation of sample

Render the sample uniform by passing it at least twice through the meat mincer (6.1) and mixing. Keep it in a completely filled, airtight container and store in such a way that deterioration and change in composition are prevented. Analyse the sample as soon as possible, but in any case within 24 h.

1) In preparation.