

INTERNATIONAL STANDARD

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Meat and meat products — Determination of moisture content (Reference method)

*Viande et produits à base de viande — Détermination de l'humidité
(Méthode de référence)*



Reference number
ISO 1442:1997(E)

Foreword

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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.

International Standard ISO 1442 was prepared by Technical Committee ISO/TC 34, *Agricultural food products*, Subcommittee SC 6, *Meat and meat products*.

This second edition cancels and replaces the first edition (ISO 1442:1973), which has been technically revised.

Annex A of this International Standard is for information only.

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Meat and meat products – Determination of moisture content (Reference method)

1 Scope

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

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1 moisture content of meat and meat products: Loss in mass obtained under the operating conditions specified in this International Standard, divided by the mass of the test portion.

Moisture content is expressed as a percentage by mass.

2.2 test result: The value of a characteristic obtained by carrying out a specified test method. [ISO 5725-1]

3 Principle

Thorough mixing of the test portion with sand and drying to constant mass at $103\text{ °C} \pm 2\text{ °C}$.

4 Material

4.1 Sand, clean, acid-washed, of a size such that it passes through a sieve of aperture size 1,4 mm and stays on a sieve of aperture size 250 μm .

Dry the sand before use at 150 °C to 160 °C and store in an airtight closed bottle.

NOTE — If clean (acid-washed) sand is not available, the sand may be cleaned by the following procedure.

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 the boiling operation with another portion of the acid until the acid no longer turns yellow after boiling. Wash the sand with distilled water until the test for chloride is negative. For storage, dry the sand at 150 °C to 160 °C .

5 Apparatus

Usual laboratory apparatus and, in particular, the following.

5.1 Mechanical or electrical equipment capable of homogenizing the laboratory sample. This includes a high-speed rotational cutter, or a mincer fitted with a plate with holes not exceeding 4,0 mm in diameter.

5.2 Flat dish, made of porcelain or metal (e.g. nickel, aluminium, stainless steel), of diameter at least 60 mm and height about 25 mm.

5.3 Thin glass rod, flattened at one end, slightly longer than the diameter of the dish (5.2).

5.4 Drying oven, electrically heated, capable of operating at $103\text{ °C} \pm 2\text{ °C}$.