INTERNATIONAL STANDARD

Second edition 2021-03

Oilseed meals — Determination of moisture and volatile matter content

Tourteaux de graines oléagineuses — Détermination de la teneur en



Reference number ISO 771:2021(E)



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 2, *Oleaginous seeds and fruits and oilseed meals*.

This second edition cancels and replaces the first edition (ISO 771:1977), which has been technically revised. The main changes compared with the previous edition are as follows:

— organization of a new collaborative trial in order to add repeatability and reproducibility data.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

Oilseed meals — **Determination of moisture and volatile** matter content

1 Scope

This document specifies a method for the determination of the moisture and volatile matter content of oilseed meals obtained by the extraction of oil from oilseeds by pressure and/or solvent.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 5502, Oilseed residues — Preparation of test samples

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

moisture and volatile matter content

loss in weight measured under the operating conditions specified in this document

Note 1 to entry: The moisture and volatile matter content is expressed as a mass fraction in grams per 100 g.

4 Principle

The sample is ground to a particle size of 1 mm, followed by drying of a test portion at (103 ± 2) °C in an oven at atmospheric pressure, until practically constant mass is reached.

5 Apparatus

5.1 Analytical balance, readability 0,000 1 g, weighing precision 0,001 g.

5.2 Mechanical mill, easy to clean and allowing the meals to be ground, without heating and without appreciable change in the moisture, volatile matter and oil content, to particles passing completely through the sieve (5.3).

5.3 Sieve, with apertures of diameter 1 mm.

5.4 Flat-bottomed vessel, of metal, resistant to attack under the test conditions, provided with a wellfitting lid and allowing the test portion to be spread to about 0,2 g/cm² (e.g. diameter of vessel 50 mm to 70 mm, height about 30 mm). Glass vessels with ground closures may also be used.