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**Butter — Determination of moisture, non-  
fat solids and fat contents —**

Part 1:  
**Determination of moisture content  
(Reference method)**

*Beurre — Détermination des teneurs en eau, en matière sèche non grasse  
et en matière grasse —*

*Partie 1: Détermination de la teneur en eau (Méthode de référence)*



Reference numbers  
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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.ch](mailto:copyright@iso.ch)  
Web [www.iso.ch](http://www.iso.ch)

International Dairy Federation  
41 Square Vergote • B-1030 Brussels  
Tel. + 32 2 733 98 88  
Fax + 32 2 733 04 13  
E-mail [info@fil-idf.org](mailto:info@fil-idf.org)  
Web [www.fil-idf.org](http://www.fil-idf.org)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. 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 member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 3727 | IDF 80 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 3727-1 | IDF 80-1 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF), in collaboration with AOAC International. It is being published jointly by ISO and IDF and separately by AOAC International.

This first edition of ISO 3727-1 | IDF 80-1, together with ISO 3727-2 | IDF 80-2 and ISO 3727-3 | IDF 80-3, cancels and replaces ISO 3727:1977, which has been technically revised.

ISO 3727 | IDF 80 consists of the following parts, under the general title *Butter — Determination of moisture, non-fat solids and fat contents*:

- *Part 1: Determination of moisture content (Reference method)*
- *Part 2: Determination of non-fat solids content (Reference method)*
- *Part 3: Calculation of fat content*

Annex A of this part of ISO 3727 | IDF 80 is for information only.

## Foreword

**IDF (the International Dairy Federation)** is a worldwide federation of the dairy sector with a National Committee in every member country. Every National Committee has the right to be represented on the IDF Standing Committees carrying out the technical work. IDF collaborates with ISO and AOAC International in the development of standard methods of analysis and sampling for milk and milk products.

Draft International Standards adopted by the Action Teams and Standing Committees are circulated to the National Committees for voting. Publication as an International Standard requires approval by at least 50 % of National Committees casting a vote.

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All work was carried out by the Joint ISO/IDF/AOAC Action Team, *Water*, of the Standing Committee on *Main components of milk*, under the aegis of its project leader, Mr G. J. Beutick (NL).

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# Butter — Determination of moisture, non-fat solids and fat contents —

## Part 1: Determination of moisture content (Reference method)

### 1 Scope

This part of ISO 3727 | IDF 80 specifies the reference method for the determination of the moisture content of butter.

### 2 Term and definition

For the purposes of this part of ISO 3727 | IDF 80, the following term and definition applies.

#### 2.1

##### **moisture content**

mass fraction of substances determined by the procedure specified in this part of ISO 3727 | IDF 80

NOTE The moisture content is expressed as a percentage by mass.

### 3 Principle

A known mass of butter is dried in the presence of pumice stone at  $102\text{ °C} \pm 2\text{ °C}$ . The remaining dry mass is weighed to determine the loss in mass.

### 4 Apparatus

Usual laboratory equipment and, in particular, the following.

- 4.1 **Analytical balance**, capable of weighing to the nearest 1 mg, with a readability of 0,1 mg.
- 4.2 **Drying oven**, ventilated, thermostatically controlled, capable of maintaining a temperature of  $102\text{ °C} \pm 2\text{ °C}$  throughout the entire working space.
- 4.3 **Desiccator**, containing a suitable drying agent, for example freshly dried silica gel with hygrometric indicator.
- 4.4 **Dishes**, made of glazed porcelain, or metal resistant to corrosion under the conditions of the test, with height between 20 mm and 40 mm, and diameter between 50 mm and 70 mm.
- 4.5 **Pumice stone**, granular, with diameter between 0,8 mm and 8 mm.