

INTERNATIONAL
STANDARD

ISO
3727-2

IDF
80-2

First edition
2001-12-15

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

Part 2:
**Determination of non-fat solids content
(Reference method)**

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

*Partie 2: Détermination de la teneur en matière sèche non grasse
(Méthode de référence)*



Reference numbers
ISO 3727-2:2001(E)
IDF 80-2:2001(E)

© ISO and IDF 2001

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. Neither the ISO Central Secretariat nor the IDF accepts any liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies and IDF national committees. In the unlikely event that a problem relating to it is found, please inform the ISO Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO and IDF 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO or IDF at the respective address below.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web 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
Web www.fil-idf.org

Printed in Switzerland

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 3727-2 | IDF 80-2 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 3727-2 | IDF 80-2, together with ISO 3727-1 | IDF 80-1 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.

International Standard ISO 3727-2|IDF 80-2 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.

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).

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

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

Part 2:

Determination of non-fat solids content (Reference method)

WARNING — The determination involves the use of volatile flammable solvents. When using such solvents, all electrical apparatus employed must comply with legislation relating to possible hazards in using such solvents.

1 Scope

This part of ISO 3727 | IDF 80 specifies the reference method for the determination of the non-fat solids 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

non-fat solids content

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

NOTE The non-fat solids content is expressed as a percentage by mass.

3 Principle

Water from a known mass of butter is evaporated. The fat is extracted with light petroleum and the mass of substances remaining is determined.

4 Reagents

Use only reagents of recognized analytical grade, unless otherwise specified. The reagents shall leave no more than 1 mg of residue when the method is carried out by the method specified.

4.1 Light petroleum, with any boiling range of between 30 °C and 60 °C or, as equivalent, **pentane** [$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$] with a boiling point of 36 °C.

5 Apparatus

Usual laboratory equipment and, in particular, the following.

5.1 Analytical balance, capable of weighing to the nearest 1 mg, with a readability of 0,1 mg.