

IDF
189-3

Second edition
2004-02-01

Milk and milk products — Determination of nitrate and nitrite contents —

Part 3: Method using cadmium reduction and flow injection analysis with in-line dialysis (Routine method)

Lait et produits laitiers — Détermination des teneurs en nitrates et en nitrites —

Partie 3: Méthode par réduction au cadmium et d'analyse par injection de flux avec dialyse en ligne (Méthode de routine)



Reference numbers
ISO 14673-3:2004(E)
IDF 189-3:2004(E)

This is a preview of "ISO 14673-3:2004". [Click here to purchase the full version from the ANSI store.](#)

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.

© ISO and IDF 2004

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.org
Web www.iso.org

International Dairy Federation
Diamant Building • Boulevard Auguste Reyers 80 • 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

Published in Switzerland

This is a preview of "ISO 14673-3:2004". Click here to purchase the full version from the ANSI store.

Contents		Page
Foreword		iv
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Principle		2
5 Reagents		2
6 Apparatus		3
7 Sampling		5
8 Preparation of test sample		5
8.1 Cheese		5
9 Procedure		6
9.1 Checking the reducing capacity of the cadmium column		6
9.2 Regeneration of the cadmium column		6
9.3 Test portion		6
9.4 Extraction		6
9.5 Determination of nitrite content		7
9.6 Determination of nitrate content		7
10 Calculation and expression of results		7
10.1 Nitrite content		7
10.2 Nitrate content		8
11 Precision		8
11.1 General		8
11.2 Nitrite content		8
11.3 Nitrate content		9
12 Test report		9
Bibliography		10

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 2.

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 the member bodies casting a vote.

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

ISO 14673-3|IDF 189-3 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 second edition cancels and replaces the first edition (ISO 14673-3|IDF 189-3:2001), of which it constitutes a minor revision.

ISO 14673|IDF 189 consists of the following parts, under the general title *Milk and milk products — Determination of nitrate and nitrite contents*:

- *Part 1: Method using cadmium reduction and spectrometry*
- *Part 2: Method using segmented flow analysis (Routine method)*
- *Part 3: Method using cadmium reduction and flow injection analysis with in-line dialysis (Routine method)*

This is a preview of "ISO 14673-3:2004". [Click here to purchase the full version from the ANSI store.](#)

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 the National Committees casting a vote.

ISO 14673-3|IDF 189-3 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, *Minerals and minor compounds*, of the Standing Committee on *Minor components characterization of physical properties*, under the aegis of its project leader, Mr G. Bråthen (NO).

This second edition, together with ISO 14673-1|IDF 189-1 and ISO 14673-2|IDF 189-2, cancels and replaces IDF 84A:1984, IDF 95A:1982, IDF 96A:1987, IDF 97A:1985 and IDF 120:1984, which have been technically revised.