First edition 2005-02-01

Liquid milk — Determination of acidsoluble β -lactoglobulin content — Reverse-phase HPLC method

Lait liquide — Détermination de la teneur en β -lactoglobuline soluble dans l'acide — Méthode par chromatographie liquide haute performance en phase inverse



Reference numbers ISO 13875:2005(E) IDF 178:2005(E)

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 2005

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 Published in Switzerland 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

Contents

Forewordiv		
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	1
5	Reagents	1
6	Apparatus	2
7	Sampling	3
8	Procedure	3
8.1	Preparation of test portion	
8.2	Preparation of test solution	
8.3	Preparation of reference portion	
8.4	Preparation of reference solutions for the multi-point calibration	
8.5	Preparation of the reference solution for the "single-point" calibration procedure	
8.6	HPLC determination	
8.7	Integration mode	6
9	Calculation and expression of results	8
9.1	Multi-point calibration	
9.2	Single-point calibration	9
9.3	Expression of results	9
10	Standardization of the reference sample	10
10.1	General	10
10.2	Preparation of the standard sample	10
10.3	Determination of protein content	
10.4	Determination of β -LG content in the reference sample	10
10.5	Calculation of the β -LG content	
10.6	Expression of results	11
11	Precision	11
11.1	Interlaboratory test	
11.2	Repeatability	
11.3	Reproducibility	
12	Test report	
Annex	A (informative) Results of interlaboratory trials	
Bibliography		14

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 13875 IDF 178 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.

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.

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

ISO 13875 IDF 178 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, *Characterization of heat treatment*, of the Standing Committee on *Minor components and characterization of physical properties*, under the aegis of its project leader, Prof. L. Pellegrino (IT).