INTERNATIONAL STANDARD

ISO 23293 IDF 247

First edition 2020-02

Milk-based infant formula powders — Quantification of whey protein content by sodium dodecyl sulfate-capillary gel electrophoresis (SDS-CGE)

Formules infantiles en poudre à base de lait — Quantification de la teneur en protéine de lactosérum par électrophorèse capillaire sur gel contenant du dodécylsulfate de sodium (SDS-CGE)

(https://standards.iteh.ai) Document Preview

ISO 23293:2020

https://standards.iteh.ai/catalog/standards/iso/112485af-b68b-49ad-99d7-f3ff48939cfb/iso-23293-2020



iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 23293:2020

https://standards.iteh.ai/catalog/standards/iso/112485af-b68b-49ad-99d7-f3ff48939cfb/iso-23293-2020



COPYRIGHT PROTECTED DOCUMENT

 $\hbox{@}\>\>$ ISO and IDF 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

International Dairy Federation Silver Building • Bd Auguste Reyers 70/B B-1030 Brussels

Phone: +32 2 325 67 40 Fax: +32 2 325 67 41 Email: info@fil-idf.org Website: www.fil-idf.org

Contents			Page	
Forev	vord		iv	
1	Scope	2	1	
2	Normative references		1	
3	Terms and definitions		1	
4	Principle		1	
5	Reagents and materials			
6	Appa	Apparatus		
7	7.1 7.2 7.3	Sample preparation CGE analysis Electropherogram processing 7.3.1 Electropherogram integration 7.3.2 Identification of the casein region	3 3 4 4	
8	Syste	System suitability		
9	Calculations and expression of results 9.1 Calculation of whey protein content 9.2 Expression of results		5	
10	Precision II en Standards		5	
	10.1 10.2	Interlaboratory tests Infant formulas with a whey protein content of 40 % or more 10.2.1 Repeatability	6 6	
	10.3	10.2.2 Reproducibility	6 6 6	
11sta	Test r	eport/catalog/standards/iso/112485af-b68b-49ad-99d7-f3ff48939cfb/iso-23293-2020	6	
		ormative) Example of a CGE analysis		
	_	ormative) Precision data		
	•	y		

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 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. The method described in this document is equivalent to the AOAC Official Method AOAC 2016.15: Quantification of Whey Protein Content in Milk-Based Infant Formula Powders by Sodium Dodecyl Sulfate-Capillary Gel Electrophoresis (SDS-CGE), First Action 2016, Final Action 2018.

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 www.iso.org/members.html.

IDF (the International Dairy Federation) is a non-profit private sector organization representing the interests of various stakeholders in dairying at the global level. IDF members are organized in National Committees, which are national associations composed of representatives of dairy-related national interest groups including dairy farmers, dairy processing industry, dairy suppliers, academics and governments/food control authorities.

ISO and IDF collaborate closely on all matters of standardization relating to methods of analysis and sampling for milk and milk products. Since 2001, ISO and IDF jointly publish their International Standards using the logos and reference numbers of both organizations.

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

This document was prepared by the IDF Standing Committee on Analytical Methods for Composition and ISO Technical Committee ISO/TC 34, Food products, Subcommittee SC 5, Milk and milk products, in collaboration with AOAC INTERNATIONAL. It is being published jointly by ISO and IDF, and separately by AOAC INTERNATIONAL. The method described in this document is equivalent to the AOAC Official Method AOAC 2016.15: Quantification of Whey Protein Content in Milk-Based Infant Formula Powders by Sodium Dodecyl Sulfate-Capillary Gel Electrophoresis (SDS-CGE), First Action 2016, Final Action 2018.

The work was carried out by the IDF/ISO Action Team (C31) of the *Standing Committee on Analytical Methods for Composition* under the aegis of its project leader Mr E. Konings (CH).

(https://standards.iteh.ai)
Document Preview

ISO 23293:2020

https://standards.iteh.ai/catalog/standards/iso/112485af-b68b-49ad-99d7-f3ff48939cfb/iso-23293-2020

iTeh Standards (https://standards.iteh.ai) Document Preview

ISO 23293:2020

https://standards.iteh.ai/catalog/standards/iso/112485af-b68b-49ad-99d7-f3ff48939cfb/iso-23293-2020