1. Record Nr. UNINA9910816493503321

Autore	Schuck Pierre
Titolo	Analytical methods for food and dairy powders / / Pierre Schuck, Anne Dolivet, and Romain Jeantet
Pubbl/distr/stampa	Chichester, West Sussex, : Wiley, 2012
ISBN	9786613616524 9781118307427 1118307429 9781621982203 1621982203 9781280586699 1280586699 9781118307403 1118307402 9781118307397 1118307399 9781118307441 1118307445
Edizione	[1st ed.]
Descrizione fisica	1 online resource (254 pages)
Altri autori (Persone)	DolivetAnne JeantetRomain
Disciplina	664/.07
Soggetti	Dairy products - Drying Food - Analysis Food - Composition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Analytical Methods for Food and Dairy Powders; CONTENTS; Foreword; Chapter 1: Dehydration Processes and their Influence on Powder Properties; 1.1. Overview of operations; 1.1.1. Concentration by evaporation; 1.1.2. Drying; 1.2. Properties of dehydrated products; 1.2.1. Biochemical and physicochemical properties; 1.2.2. Microbiological properties; 1.2.3. Properties of use; 1.3. Bibliography;

Chapter 2: Determination of Dry Matter and Total Dry Matter; 2.1. Determination of free moisture or dry matter; 2.1.1. Purpose and range of application; 2.1.2. Definition; 2.1.3. Principle
2.1.4. Reagents and other products2.1.5. Instruments and glassware; 2.1.6. Safety; 2.1.7. Procedure; 2.1.8. Expression of results; 2.1.9. Remarks; 2.1.10. Precision values; 2.1.11. Examples; 2.2. Determination of total moisture or total dry matter; 2.2.1. Purpose and range of application; 2.2.2. Definition; 2.2.3. Principle; 2.2.4. Reagents and other products; 2.2.5. Instruments and glassware; 2.2.6. Safety; 2.2.7. Procedure; 2.2.8. Expression of results; 2.2.9. Remarks; 2.2.10. Precision values; 2.2.11. Analysis report; 2.2.12. Examples; 2.3. Bibliography
Chapter 3: Determination of Nitrogen Fractions3.1. Determination of the total nitrogen content (Kjeldahl method); 3.1.1. Purpose and range of application; 3.1.2. Definition; 3.1.3. Principle; 3.1.4. Reagents and other products; 3.1.5. Instruments and glassware; 3.1.6. Safety; 3.1.7. Procedure; 3.1.8. Expression of results; 3.1.9. Precision values; 3.1.10. Examples; 3.1.11. Annex; 3.2. Determination of the nitrogen content soluble at pH 4.60; 3.2.1. Purpose and range of application; 3.2.2. Definition; 3.2.3. Principle; 3.2.4. Reagents and other products; 3.2.5. Instruments and glassware
3.2.6. Safety3.2.7. Procedure; 3.2.8. Expression of results; 3.2.9. Precision values; 3.2.10. Examples; 3.2.11. Annex; 3.3. Determination of the non-protein nitrogen content; 3.3.1. Purpose and range of application; 3.3.2. Definition; 3.3.3. Principle; 3.3.4. Reagents and other products; 3.3.5. Instruments and glassware; 3.3.6. Safety; 3.3.7. Procedure; 3.3.8. Expression of results; 3.3.9. Precision values; 3.3.10. Examples; 3.3.11. Annex; 3.4. Determination of non-denatured whey protein nitrogen in skimmed milk powder; 3.4.1. Purpose and range of application; 3.4.2. Definition
3.4.3. Principle3.4.4. Expression of results; 3.4.5. Remarks; 3.4.6. Examples; 3.5. Protein nitrogen conversion factors based on amino acid composition in the case of milk and soy; 3.5.1. Methods for the determination of the conversion factor; 3.5.2. Conversion factors for milk, specific milk proteins, certain milk products and infant formulas; 3.5.3. Conversion factors for soy and its derivatives; 3.5.4. Conclusion; 3.6. Bibliography; Chapter 4: Determination of the Rate of Lactose Crystallisation; 4.1. Definitions; 4.2. Principle; 4.2.1. Determination of the moisture content
4.2.2. Determination of the total moisture content

Sommario/riassunto

Food and dairy powders are created by dehydrating perishable produce, such as milk, eggs, fruit and meat, in order to extend their shelf life and stabilise them for storage or transport. These powders are in high demand for use as ingredients and as food products in their own right, and are of great economic importance to the food and dairy industry worldwide. Today, the ability to control food and dairy powder quality is a source of key competitive advantage. By varying the dehydration process design, and by controlling the technological and thermodynamic parameters during dehydration, it is