

Australian Standard[®]

Methods of chemical and physical testing for the dairying industry

Method 1.3: General methods and principles— Determination of fat—Gravimetric method

AS 2300.1.3—2008

PREFACE

This Standard was prepared by the Standard Australia Committee, FT-024, Food Products and Subcommittee FT-024-05, Dairy Products to supersede AS 2300.1.3—1988.

The Committee did not recommend the adoption of ISO Standards, which were outdated and product specific. The superseded ISO standards include a test for solubility of extracted material and, if insolubles are present, fat is calculated from the mass difference before and after the collection vessel is washed out. Current ISO standards rely totally on visual inspection of the extracted material. As such, the Committee did not recommend adopting the relevant ISO standards to replace AS 2300.1.3—1988, as the approach taken for final reporting differs between standards, and this approach is not suitable for a reference method.

After a periodic review, the Committee recommended a new edition. This edition confirms the method without technical changes but updates the referenced documents and reflects the current editorial style and includes a clause on uncertainty of measurement.

AS 2300 comprises a series of methods and related Standards for chemical and physical testing of milk and dairy products, including the preparation of samples for testing.

Standards in the AS 2300 series are divided into categories according to type of product to be tested, as follows:

AS

- 2300.1 General methods and principles
- 2300.2 Liquid milk
- 2300.4 Dried milk and dried milk products
- 2300.5 Condensed milk
- 2300.6 Cheese
- 2300.7 Butter
- 2300.8 Anhydrous milk fat
- 2300.9 Analysis of ice-cream and frozen milk products
- 2300.10 Caseins, caseinates and coprecipitates
- 2300.11 Cultured milk products

METHOD

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Section sets out a general gravimetric method for the determination of fat in dairy products.

NOTE: Methods of preparation of test samples of specific products for determination of fat content by this method are described in Section 2.

1.2 APPLICATION

A general method is given, and this is applicable to prepared samples for a range of dairy products.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

1152 Specification for test sieves

1166 Milk and milk products—Guidance on sampling

AS/NZS

2243 Safety in laboratories

2243.1 Part 1: Planning and operational aspects

2243.2 Part 2: Chemical aspects

ISO

383 Laboratory glassware—Interchangeable conical ground joints

3889 Milk and milk products—Specification of Mojonnier-type fat extraction flasks

1.4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.4.1 Fat content

The substances determined by the procedure described in this Standard.

1.4.2 Laboratory sample

A sample prepared for sending to the laboratory, and comprising a quantity of bulk product or a sufficient number of unopened retail containers to fulfil test requirements.

NOTE: It is assumed that the laboratory sample has been taken, transported to the laboratory, and stored in accordance with the requirements of AS 1166.

1.4.3 Test portion

The quantity of product actually drawn from the test sample (or, if both are the same, from the laboratory sample) and on which the test is actually carried out.

1.4.4 Test sample

A sample in the state of preparation in which it is subjected to the test.