STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2300.1.2.1—1991
Methods of chemical and physical testing for the dairying industry
Method 1.2.1: General methods and principles—
Determination of nitrogen—Reference Kjeldahl method

RECONFIRMATION NOTICE

Technical Committee FT-024 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 10 October 2019.

The following are represented on Technical Committee FT-024:
Australian Institute of Food Science and Technology
Consumers Federation of Australia
CSIRO
Meat and Livestock Australia
National Association of Testing Authorities Australia
National Measurement Institute
NSW Food Authority
Royal Australian Chemical Institute

NOTES

Reconfirmed 2019

Australian Standard®

Methods of chemical and physical testing for the dairying industry

Method 1.2.1: General methods and principles—Determination of nitrogen—Reference Kjeldahl method

PREFACE

This Standard was prepared by the Standards Australia Committee on Chemical Analysis of Dairy Products to supersede AS 2300.1.2.1—1988.

The major alterations to the previous edition are the inclusion of precision data for the method and the addition of Appendix A which provides information on modifications to the traditional Kjeldahl method which have been shown to give comparable results. This new material is based on work carried out by the International Dairy Federation (IDF) and the Association of Official Analytical Chemists (AOAC).

When first published in 1988 this general method superseded a number of similar methods which had been previously published as sections of Australian Standards applicable to specific products. The earlier methods were:

AS	
N48—1965	Section 7, which was an endorsement of BS 1742—1951 with amendment
N60—1978	Section 15
N72—1970	Section 6
N75—1970	Section 6
1084—1975	Section 6
1629—1974	Section 5.4, which was first published as parts of AS N61—1965 and AS N67—1970.

FOREWORD

The method described is only one of many variations of the Kjeldahl method which is used to determine nitrogen in milk and milk products. There are many modifications to this basic Kjeldahl method which have been made to hasten the analysis, improve safety and reduce costs, e.g. use of hydrogen peroxide, steam distillation potentiometric titration and proprietary digestion apparatus. Some of these options are described in Appendix A. However, this Standard specifies the Kjeldahl method using traditional apparatus as the reference method.

METHOD

1 SCOPE This Standard sets out the reference Kjeldahl method for the determination of nitrogen in milk, milk fractions and milk products. The method allows for the estimation of nitrogen on a mass/mass basis and a mass/volume basis.

This method is applicable to test portions containing at least 2 mg of nitrogen. Nitrogen present as nitrate or nitrite is not determined.

NOTE: Information is given in Appendix A on the use of modified Kjeldahl systems which have been shown to provide results of similar precision to this reference method. These modifications may be used if validated.