

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2300.7.3—1991

**Methods of chemical and physical testing for the dairying industry
Method 7.3: Butter—Determination of salt**

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

Methods of chemical and physical testing for the dairying industry

Method 7.3: Butter—Determination of salt

PREFACE

This Standard was prepared by the Standards Australia Committee on Chemical Analysis of Dairy Products to supersede a corresponding method given in AS 1739 — 1975, *Analysis of butter*.

METHOD

1 SCOPE This Standard sets out a method for determining the salt content of butter. The method is also applicable to products comprising a blend of butter and edible oils that have a similar fat content to that of butter.

2 REFERENCED DOCUMENT The following document is referred to in this Standard:

AS

2300 Methods of chemical and physical testing for the dairying industry

2300.7.1 Butter—General information and preparation of samples

3 DEFINITION For the purpose of this Standard, the definition below applies.

Salt content—the chloride content of the butter as determined by the procedure described in this Standard and calculated as sodium chloride.

4 PRINCIPLE The salt in the butter is dissolved in boiling water and titrated hot with standard silver nitrate solution using potassium chromate indicator.

5 REAGENTS

5.1 General Use only reagents of recognized analytical reagent grade, and freshly distilled water or water of equivalent purity.

5.2 Silver nitrate solution—approximately 0.1 mol/L, calculated to the nearest 0.001 mol/L from the mass of silver nitrate taken, this having been dried at 120 ± 5 °C for at least 2 h. Store the solution in a sealed, brown glass bottle away from light. If the solution is kept for more than one month, the concentration shall be determined in moles per litre using sodium chloride as the primary standard.

5.3 Potassium chromate indicator—5 g/100 mL solution.

6 APPARATUS Usual laboratory apparatus is required.

7 PROCEDURE

7.1 Determination The procedure shall be as follows:

- Weigh, to the nearest 0.01 g, about 5 g of prepared butter sample (see AS 2300.7.1) into a 250 mL conical flask. Record the sample mass (m).
- Carefully add 100 mL of boiling water, mix and allow to stand for 5 min to 10 min with occasional swirling of the flask.
- When the contents of the flask are between 50°C and 55°C, add 2 mL of potassium chromate indicator (5.3) and mix.
- Using mechanical stirring, or continuously swirling the flask, titrate with the silver nitrate solution (5.2) until the indicator colour change to pale orange-brown persists for not less than 30 s. Record the titre (V_1) to the nearest 0.1 mL.

7.2 Blank Test A blank determination shall be carried out using the procedure described in Clause 7.1 using 5 mL of water in place of the sample. Record the titre (V_2).