STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2300.6.5—1990
Methods of chemical and physical testing for the dairying industry
Method 6.5: Cheese—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

Reconfirmed 2019

Australian Standard®

Methods of chemical and physical testing for the dairying industry

Method 6.5: Cheese—Determination of salt

PREFACE

This Standard was prepared by the Standards Australia Committee on Chemical Analysis of Dairy Products to supersede AS N75—1970, *Methods for the sampling and chemical analysis of cheese*, Section 5: *Determination of salt.*

METHOD

1 SCOPE. This Standard sets out two methods for the determination of the salt (sodium chloride) content of cheese as follows:

(a) Volhard method.

(b) Potentiometric method.

2 PRINCIPLE.

2.1 Volhard method. Addition of standard silver nitrate solution, to a prepared sample of cheese and determination of the amount reacting with the chlorides by back titration of the excess silver nitrate with potassium thiocyanate solution.

2.2 Potentiometric method. Potentiometric titration of the chlorides in a prepared sample of cheese with standard silver nitrate solution.

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

Salt content—the chloride content of the cheese determined by one of the procedures described in this Standard and calculated as sodium chloride.

4 REAGENTS.

4.1 General. Only reagents of recognized analytical reagent quality, and freshly distilled water or water of equivalent purity shall be used.

4.2 Reagents for Volhard method.

4.2.1 Silver nitrate solution—approximately 0.05 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 brown glass bottle away from sunlight.

4.2.2 Concentrated nitric acid (ϱ_{20} 1420 kg/m^3).

4.2.3 Nitric acid—approximately 5 mol/L solution.

4.2.4 Urea.

4.2.5 Nitrobenzene

4.2.6 Ammonium iron(III) sulfate indicator—dissolve 50 g of ammonium iron(III) sulfate $(NH_4)_2SO_4.Fe_2(SO_4)_3.24H_2O$ in 90 mL of water and add 5 mL of 5 mol/L nitric acid (4.2.3).

4.2.7 Potassium thiocyanate solution—approximately 0.05 mol/L solution standardized as follows:

(a) Pipette 20.0 mL of silver nitrate solution (4.2.1) into a 250 mL conical flask.

(b) Add 25 mL of water, 4 mL of 5 mol/L nitric acid (4.2.3) and 1 mL of ammonium iron(III) sulfate indicator (4.2.6).