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**Cheese and processed cheese  
products — Determination of chloride  
content — Potentiometric titration  
method**

*Fromages et fromages fondus — Détermination de la teneur en  
chlorures — Méthode par titrage potentiométrique*



Reference numbers  
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## Foreword

**ISO (the International Organization for Standardization)** is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5943|IDF 88 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF), in collaboration with AOAC International. It is being published jointly by ISO and IDF and separately by AOAC International.

This edition of ISO 5943|IDF 88 cancels and replaces ISO 5943:1988, of which it constitutes a minor revision.

Only editorial changes have been made.

## Foreword

**IDF (the International Dairy Federation)** is a worldwide federation of the dairy sector with a National Committee in every member country. Every National Committee has the right to be represented on the IDF Standing Committees carrying out the technical work. IDF collaborates with ISO and AOAC International in the development of standard methods of analysis and sampling for milk and milk products.

Draft International Standards adopted by the Action Teams and Standing Committees are circulated to the National Committees for voting. Publication as an International Standard requires approval by at least 50 % of the National Committees casting a vote.

ISO 5943|IDF 88 was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 5, *Milk and milk products*, and the International Dairy Federation (IDF), in collaboration with AOAC International. It is being published jointly by ISO and IDF and separately by AOAC International.

All work was carried out by the former Joint ISO/IDF/AOAC Group of Experts, *Nitrate, nitrite and phosphorus in cheese*, under the aegis of its chairman, Mr G. Bråthen (NO).

This edition of ISO 5943|IDF 88 cancels and replaces IDF 88A:1988. Only editorial changes have been made.



# Cheese and processed cheese products — Determination of chloride content — Potentiometric titration method

## 1 Scope

This International Standard specifies a potentiometric titration method for the determination of the chloride content of cheese and processed cheese products.

The method is applicable to all cheeses and processed cheese products containing more than 0,2 % (mass fraction) of chloride ion.

## 2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 2.1

#### **chloride content of cheese and processed cheese products**

mass fraction of substances determined by the procedure specified in this International Standard

NOTE It is expressed as a mass fraction, in percent, of chloride ion or sodium chloride or any other chloride.

## 3 Principle

A test portion is suspended in water. The suspension is acidified with nitric acid then the chloride ions are titrated potentiometrically with a silver nitrate standard solution.

## 4 Reagents

Use only reagents of recognized analytical grade, unless otherwise specified, and distilled or demineralized water or water of at least equivalent purity.

### **4.1 Silver nitrate standard solution, $c(\text{AgNO}_3) = 0,08 \text{ mol/l}$ to $0,12 \text{ mol/l}$ .**

Dissolve 13,6 g to 20,4 g of silver nitrate in water which is practically free from carbon dioxide and dilute to 1 000 ml. Standardize the solution against sodium chloride (NaCl), which has previously been dried at 300 °C, expressing the concentration of the silver nitrate standard solution to four decimal places.

Store the solution away from direct sunlight.

### **4.2 Nitric acid, $c(\text{HNO}_3) \approx 4 \text{ mol/l}$ .**