

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION

### R 1738

BUTTER

DETERMINATION OF SALT CONTENT

(REFERENCE METHOD)

1st EDITION

March 1971

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## BRIEF HISTORY

The ISO Recommendation R 1738, *Butter – Determination of salt content (Reference method)*, was drawn up by Technical Committee ISO/TC 34, *Agricultural food products*, the Secretariat of which is held by the Magyar Szabványügyi Hivatal (MSZH).

Work on this question led to the adoption of Draft ISO Recommendation No. 1738, which was circulated to all the ISO Member Bodies for enquiry in April 1969. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	Hungary	Romania
Brazil	India	South Africa, Rep. of
Belgium	Iran	Sweden
Chile	Israel	Switzerland
Czechoslovakia	Netherlands	Turkey
France	Peru	U.A.R.
Germany	Poland	
Greece	Portugal	

The following Member Bodies opposed the approval of the Draft :

New Zealand  
United Kingdom

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

NOTE. – This ISO Recommendation has been developed jointly with the IDF (International Dairy Federation) and the AOAC (Association of Official Analytical Chemists, U.S.A.) on the basis of a preliminary IDF Standard, for the purpose of being included in the FAO/WHO Code of Principles concerning Milk and Milk Products and Associated Standards.

The text as approved by the above organizations was also published by FAO/WHO (Code of Principles, Standard No. B-8), by the IDF (IDF Standard 12A) and by the AOAC (Official Methods of Analysis, 11th Edition, 16.166).

ISO Recommendation

R 1738

March 1971

## BUTTER

DETERMINATION OF SALT CONTENT  
(REFERENCE METHOD)

## 1. SCOPE

This ISO Recommendation describes a reference method for the determination of the salt content of butter.

## 2. DEFINITION

By the *salt of butter* is meant the chlorides determined by the procedure described, expressed as sodium chloride. The salt content is expressed as a percentage by mass.

## 3. PRINCIPLE

Melting of the butter by the addition of boiling water and titration of the chlorides in the mixture with a solution of silver nitrate, using potassium chromate as indicator (the Mohr procedure).

## 4. REAGENTS

- 4.1 *Silver nitrate*, 0.1 N standard volumetric solution.
- 4.2 *Potassium chromate* ( $K_2CrO_4$ ), solution of 5 g in 100 ml of distilled water.

## 5. APPARATUS

Usual laboratory apparatus, not otherwise specified, and the following items :

- 5.1 *Analytical balance*
- 5.2 *Conical flask*, 250 ml capacity.
- 5.3 *Burette*, graduated in 0.1 ml.

## 6. SAMPLING

Carry out the sampling by the appropriate method described in ISO Recommendation R 707, *Milk and milk products - Sampling*.

## 7. PROCEDURE

## 7.1 Preparation of the sample

Homogenize the sample by softening it in a closed container by warming in a water bath kept at as low a temperature as practicable in order not to break the emulsion. Temperatures of 23 to 28 °C are often suitable for this purpose, but in no case should the temperature be above 39 °C. Shake the sample container at frequent intervals during the softening process in order to mix the sample thoroughly. Remove the sample container from the water bath and shake vigorously at frequent intervals until the sample has cooled to a thick, creamy consistency. A mechanical shaker may be used.