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# INTERNATIONAL STANDARD 2917

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## Meat and meat products — Measurement of pH (Reference method)

*Viandes et produits à base de viande — Mesurage du pH (Méthode de référence)*

First edition — 1974-04-01

UDC 637.5 : 545.371

Ref. No. ISO 2917-1974 (E)

**Descriptors :** animal products, meat, chemical analysis, pH, measurement.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2917 was drawn up by Technical Committee ISO/TC 34, *Agricultural food products*, and circulated to the Member Bodies in August 1972.

It has been approved by the Member Bodies of the following countries :

Australia	Germany	Romania
Belgium	Hungary	South Africa, Rep. of
Brazil	India	Spain
Chile	Iran	Thailand
Czechoslovakia	Ireland	Turkey
Denmark	Israel	United Kingdom
Egypt, Arab Rep. of	Netherlands	
France	Poland	

This International Standard has also been approved by the International Union of Pure and Applied Chemistry (IUPAC).

The Member Body of the following country expressed disapproval of the document on technical grounds :

New Zealand

# Meat and meat products — Measurement of pH (Reference method)

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a reference method for measuring the pH of meat and meat products.

Two procedures are given : clause 8 describes the procedure for products which can be homogenized, and clause 9 the procedure for products which cannot be homogenized, for the purposes of the investigation.

## 2 REFERENCE

ISO 3100, *Meat and meat products — Sampling*.<sup>1)</sup>

## 3 DEFINITION

**pH of meat and meat products** : The result of measurements performed according to the procedure described.

NOTE — Owing to the relatively high electrolyte content of the aqueous phase of many meat products and to the fact that the pH meter, on the other hand, is calibrated with buffers of a low electrolyte content, the value measured cannot, in general, be identified with the theoretical pH value.

## 4 PRINCIPLE

Measurement of the potential difference between a glass electrode and a reference electrode, which are placed in a sample of the meat or meat product.

## 5 CLEANING LIQUIDS

### 5.1 Ethanol, 95 % (V/V).

### 5.2 Diethyl ether, saturated with water.

### 5.3 Distilled water, or water of equal purity.

## 6 APPARATUS

**6.1 pH meter**, graduated in units of 0,1 pH or less, allowing readings accurate within 0,05 pH unit. If a temperature correction system is not provided, the scale shall apply to measurements at 20 °C. The device shall be sufficiently protected from induction currents due to external electric charges or currents during the measurements.

**6.2 Glass electrode**. Glass electrodes of various geometrical shapes may be used; for example spherical, conical, cylindrical or needle-shaped.

Store the glass electrode with its membrane immersed in water.

**6.3 Reference electrode**, for example calomel electrode or silver chloride electrode containing saturated potassium chloride solution.

Unless otherwise specified, store the electrode in a saturated potassium chloride solution.

NOTE — The reference and glass electrodes may also be assembled into a system of combined electrodes. Unless otherwise specified, store the electrodes in distilled water.

**6.4 Mechanical meat mincer**, laboratory size, fitted with a perforated plate with holes not greater than 4 mm in diameter.

1) At present at the stage of draft.