INTERNATIONAL STANDARD

ISO 4134

Third edition
2021-07

Meat and meat products — Determination of L-(+)-glutamic acid content — Reference method

Viande et produits à base de viande — Détermination de la teneur en acide L-(+)-glutamique — Méthode de référence

Reference number
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Foreword

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 6, *Meat, poultry, fish, eggs and their products*.

This third edition cancels and replaces the second edition (ISO 4134:1999), which has been technically revised. The main changes compared with the previous edition are as follows:

- a new test method, the light absorption microplate reader method, has been added;
- the order of the clauses has been rearranged;
- the Scope (Clause 1) has been revised to specify free L-(+)-glutamic acid in meat and meat products;
- the Normative references (Clause 2) have been updated;
- the Terms and definitions (Clause 3) have been modified by adding the term "free L-(+)-glutamic acid";
- in Clause 4, the description of "extraction of L-(+)-glutamic acid of test portion" has been modified and the detection wavelength has been changed from "492 nm" to "490 nm";
- in 7.1, the identification of enzyme activity units for diaphorase and glutamate dehydrogenase has been supplemented; the concentration of KOH, NAD has been modified; the NAD and diaphorase have been mixed into a solution; and the buffer, NAD and enzymes have been labelled with R1, R2, and R3;
- the apparatus list (7.2) has been updated;
- in 7.3, the procedure of the test method of spectrophotometer has been modified by halving the sample mass and solution volume;
- in 7.3.4, the method of judging the absorbance of the reaction end point has been modified and, as a result, the previous Annex B "Example of plotting and extrapolation of absorbance values" has been deleted;