
**Microbiology of the food chain —
Enumeration of *Brochothrix* spp. —
Colony-count technique**

*Microbiologie de la chaîne alimentaire — Dénombrement de
Brochothrix spp. — Technique par comptage des colonies
obtenues*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*.

This second edition cancels and replaces the first edition (ISO 13722:1996), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the method specified in this document has been aligned with the NMKL (Nordic Committee on Food Analysis) method described in Reference [8];
- the title has been changed from 'Meat and meat products' into 'Microbiology of the food chain' and from 'Enumeration of *Brochothrix thermosphacta*' into 'Enumeration of *Brochothrix* spp.', and the scope has been changed accordingly;
- actidione (cycloheximide) has been omitted from the enumeration medium because of its toxicity;
- the catalase test has been added as confirmation test;
- validation data from an NMKL study [8] have been included ([Clause 11](#)).

Microbiology of the food chain — Enumeration of *Brochothrix* spp. — Colony-count technique

1 Scope

This document specifies a method for the enumeration of viable *Brochothrix* spp. by means of a colony-count technique.

This document is especially applicable to meat and meat products, but is also suitable for the examination of the following:

- other products intended for human consumption,
- products intended for animal feeding,
- environmental samples in the area of food and feed production, handling, and
- samples from the primary production stage.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6887 (all parts), *Microbiology of the food chain — Preparation of test samples, initial suspension and decimal dilutions for microbiological examination*

ISO 7218, *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations*

ISO 11133, *Microbiology of food, animal feed and water — Preparation, production, storage and performance testing of culture media*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

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***Brochothrix* spp.**

Gram-positive bacteria which form characteristic oxidase-negative and catalase-positive colonies on a solid selective medium [streptomycin sulfate/thallium acetate agar (STAA)] under the test conditions specified in this document

Note 1 to entry: To date only two species of *Brochothrix* have been described, *Br. thermosphacta* and *Br. campestris*. *Br. thermosphacta* has often been reported in meat and meat products, but *Br. campestris* has so far only been identified in samples from soil and grass.^[9,10] The method described in this document cannot differentiate between these two species.