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Microbiology of the food chain - Detection and quantification of histamine in fish and fishery products - HPLC method (ISO 19343:2017)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD

EN ISO 19343

NORME EUROPÉENNE

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Microbiology of the food chain - Detection and quantification of histamine in fish and fishery products - HPLC method (ISO 19343:2017)

Microbiologie de la chaîne alimentaire - Détection et quantification de l'histamine dans le poisson et les produits de la pêche - Méthode par CLHP (ISO 19343:2017)

Mikrobiologie der Lebensmittelkette - Nachweis und Bestimmung von Histamin in Fisch und Fischereierzeugnissen - HPLC-Methode (ISO 19343:2017)

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European foreword

This document (EN ISO 19343:2017) has been prepared by Technical Committee ISO/TC 34 “Food products” in collaboration with Technical Committee CEN/TC 275 “Food analysis - Horizontal methods” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2018 and conflicting national standards shall be withdrawn at the latest by January 2018.

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Endorsement notice

The text of ISO 19343:2017 has been approved by CEN as EN ISO 19343:2017 without any modification.

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**Microbiology of the food chain —
Detection and quantification of
histamine in fish and fishery products
— HPLC method**

*Microbiologie de la chaîne alimentaire — Détection et quantification de
l'histamine dans le poisson et les produits de la pêche — Méthode CLHP*



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ISO 19343:2017(E)

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).

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This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 275, *Food analysis — Horizontal methods*, in collaboration with ISO Technical Committee TC 34, *Food products*, Subcommittee SC 9, *Microbiology*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Introduction

Histamine is a causative agent of scombroid poisoning or histamine fish poisoning. Histamine can be present mainly in *Scombridae* (tuna, mackerel) and *Clupeidae* (herring, sardine), species which contain a high level of free histidine. Histamine is formed through the decarboxylation of histidine by microbiological histidine decarboxylase.

Histamine [2-(1H-imidazol-5-yl)ethanamine] is defined as a biologically active low molecular weight basic nitrogenous molecule. The consumption of food containing significant concentration of histamine can cause symptoms similar to those associated to food allergies.

This document was developed in response to the need to standardize a method for histamine detection and quantification in fish and fishery products, in particular for European Regulation 2073/2005^[1] on microbiological criteria for foodstuffs.

Microbiology of the food chain — Detection and quantification of histamine in fish and fishery products — HPLC method

WARNING — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices.

1 Scope

This document specifies a high performance liquid chromatography (HPLC) method to analyse histamine in fish and fishery products (fish sauces, fish matured by enzyme in brine, etc.) intended for human consumption.

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 3696, *Water for analytical laboratory use — Specification and test methods*

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