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Interested committees:

Title: Draft BS EN 13806-3 Foodstuffs - Determination of trace elements. Part 3: Determination of total mercury in foodstuffs with atomic absorption directly from the foodstuff (elemental mercury analysis).

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

**Foodstuffs - Determination of trace elements - Part 3:
Determination of total mercury in foodstuffs with atomic
absorption directly from the foodstuff (elemental mercury
analysis)**

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 275.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (prEN 13806-3:2023) has been prepared by Technical Committee CEN/TC 275 “Food analysis – Horizontal methods”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13806:2002.

The main changes compared to the previous edition are listed below:

- the document has been split up into three separate parts: EN 13806-1¹ covering the AAS-cold-vapour technique, EN 13806-2² the AFS-cold-vapour technique and EN 13806-3 the solid sample AAS technique;
- full technical revision to bring the technical realization up to date with the latest technology;
- Stabilization of the digest solution;
- Update of statistical data by new collaborative study;
- full editorial revision.

This document was developed by the “Element Analysis” working group of the Federal Office of Consumer Protection and Food Safety (BVL) according to the German Food and Feed Act, Paragraph 64.

¹ Under preparation. Stage at the time of publication: prEN 13806-1:2023.

² Under preparation. Stage at the time of publication: prEN 13806-2:2023.

Introduction

This document has been developed in parallel with EN 13806-1:—¹[2] and EN 13806-2:—²[3]. All three methods were validated in parallel in collaborative studies with the same scope. They are statistically compatible in performances. This allows the users of these documents to employ the most appropriate/available method depending on the purpose of their studies. The statistical parameters of these standards are presented in the respective documents.

1 Scope

This document specifies a method for the determination of total mercury (Hg) in foodstuffs using direct atomic absorption spectrometry after thermal decomposition in an oxygen or air flow and concentration by amalgam formation. The method is applicable for solid and liquid samples.

This method was tested in a collaborative study carried out on seven different materials with a mercury concentration in the range from 0,005 mg/kg to 5,20 mg/kg and successfully validated in this range.

The following foodstuffs were analysed:

- Saithe (dried);
- Celery (dried);
- Wheat noodle powder;
- Wild mushrooms (dried);
- Pig liver (dried);
- Cacao powder;
- Tuna fish (dried).

The lower limit of the method's applicability varies depending on the food matrix and the water content of the foodstuff. It is a laboratory-specific value and is defined by the laboratory when calculating the limit of quantification (see 9.2).

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.

EN 13804:2013, *Foodstuffs - Determination of elements and their chemical species - General considerations and specific requirements*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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