

<b>STN</b>	<b>Potraviny</b> <b>Stanovenie ochratoxínu A v korení, sladkom drierku, kakau a vo výrobkoch z kakaa s prečistením na imunoafinitnej kolóne (IAC) a stanovením vysokoúčinnou kvapalinovou chromatografiou s fluorescenčnou detekciou (HPLC-FLD)</b>	<b>STN</b> <b>EN 17250</b>  56 0561
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Foodstuffs - Determination of ochratoxin A in spices, liquorice, cocoa and cocoa products by IAC clean-up and HPLC-FLD

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

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English Version

## Foodstuffs - Determination of ochratoxin A in spices, liquorice, cocoa and cocoa products by IAC clean-up and HPLC-FLD

Produits alimentaires - Dosage de l'ochratoxine A dans les épices, la réglisse, les produits à base de réglisse, le cacao et les produits à base de cacao par purification sur colonne d'immuno-affinité et CLHP-DFL

Lebensmittel - Bestimmung von Ochratoxin A in Gewürzen, Süßholz, Kakao und Kakaoverzeugnissen nach IAC-Reinigung mit HPLC-FLD

This European Standard was approved by CEN on 18 November 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**EN 17250:2020 (E)**

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## **European foreword**

This document (EN 17250:2020) has been prepared by 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of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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**EN 17250:2020 (E)****Introduction**

The mycotoxin ochratoxin A has a chemical structure comprising a dihydrocoumarin moiety linked to a molecule of L- $\beta$ -phenylalanine via an amide bond. Ochratoxin A is produced by several fungal species in the *Penicillium* and *Aspergillus* genera, primarily *Penicillium verrucosum*, *Aspergillus ochraceus* and *Aspergilli* of the section *Nigri*, especially *A. carbonarius*. Cereals such as wheat are especially affected, as well as a diverse range of other foodstuffs such as dried fruit, spices, cocoa, coffee, wine, beer, liquorice and products thereof.

WARNING 1 — Suitable precaution and protection measures need to be taken when carrying out working steps with harmful chemicals. The latest version of the hazardous substances ordinance (EU) 1907/2006 [3] should be taken into account as well as appropriate national statements e.g. such as in [4].

WARNING 2 — The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all the safety problems associated with its use. It is the responsibility of the user of this document to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

WARNING 3 — Ochratoxin A is a potent nephrotoxic agent, a carcinogen and has genotoxic properties. Ochratoxin A has been classified by IARC as Group 2B.

## **1 Scope**

This document specifies a procedure for the determination of ochratoxin A (OTA) in chilli, paprika, black and white pepper, nutmeg, spice mix, liquorice (root and extracts), cocoa and cocoa products by high performance liquid chromatography (HPLC) with immunoaffinity column clean-up and fluorescence detection (FLD).

This method has been validated in interlaboratory studies via the analysis of both naturally contaminated and spiked samples ranging from 1,0 µg/kg to 84,9 µg/kg for spices (paprika and chili [5], black and white pepper, nutmeg and spice mix [6]), ranging from 7,7 µg/kg to 96,8 µg/kg for liquorice and liquorice products [7] and ranging from 2,1 µg/kg to 26,3 µg/kg for cocoa and cocoa products [6].

For further information on the validation, see Clause 10 and Annex B.

## **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 ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**