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**Mikrobiologija živil in krme - Odkrivanje prisotnosti patogenih mikroorganizmov z metodo na osnovi polimerazne verižne reakcije (PCR) v realnem času - Horizontalna metoda za ugotavljanje prisotnosti Escherichia coli (STEC) in določevanje serotipov O157, O111, O26, O103 in O145 (ISO/TS 13136:2012)**

Microbiology of food and animal feed - Real-time polymerase chain reaction (PCR)-based method for the detection of food-borne pathogens - Horizontal method for the detection of Shiga toxin-producing Escherichia coli (STEC) and the determination of O157, O111, O26, O103 and O145 serogroups (ISO/TS 13136:2012)

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Mikrobiologie von Lebensmitteln und Futtermitteln - Real-time-Polymerase-Kettenreaktion (PCR) zum Nachweis von pathogenen Mikroorganismen in Lebensmitteln - Horizontales Verfahren für den Nachweis von Shiga-Toxin bildenden Escherichia coli (STEC) der Serogruppen O157, O111, O26, O103 und O145 (ISO/TS 13136:2012)

Microbiologie des aliments - Méthode basée sur la réaction de polymérisation en chaîne (PCR) en temps réel pour la détection des micro-organismes pathogènes dans les aliments - Méthode horizontale pour la détection des Escherichia coli producteurs de Shigatoxines (STEC) et la détermination des sérogroupes O157, O111, O26, O103 et O145 (ISO/TS 13136:2012)

**Ta slovenski standard je istoveten z: CEN ISO/TS 13136:2012**

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Microbiology of food and animal feed - Real-time polymerase chain reaction (PCR)-based method for the detection of food-borne pathogens - Horizontal method for the detection of Shiga toxin-producing Escherichia coli (STEC) and the determination of O157, O111, O26, O103 and O145 serogroups (ISO/TS 13136:2012)

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This Technical Specification (CEN/TS) was approved by CEN on 16 July 2012 for provisional application.

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## Foreword

This document (CEN ISO/TS 13136:2012) has been prepared by Technical Committee CEN/TC 275 "Food analysis - Horizontal methods" the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 34 "Food products".

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**Microbiology of food and animal feed —  
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## Foreword

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ISO/TS 13136 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 9, *Microbiology*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

## Introduction

Shiga toxin-producing *Escherichia coli* (STEC) are pathogenic *E. coli*, which can cause diarrhoea as well as more severe diseases in humans such as haemorrhagic colitis and haemolytic uremic syndrome (HUS). Although STEC may belong to a large number of serogroups, those that have been firmly associated with the most severe forms of the disease, in particular HUS, belong to O157, O26, O111, O103, and O145 (Reference [1]).

The following nomenclature has been adopted in this Technical Specification:

- *stx*: Shiga toxin genes (synonymous with *vtx*);
- *Stx*: Shiga toxin (synonymous with *Vtx*: Verocytotoxin);
- STEC: Shiga toxin-producing *Escherichia coli* (synonymous with VTEC: Verocytotoxin-producing *Escherichia coli*).

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