



SLOVENSKI STANDARD
SIST-TS CEN/TS 17804:2024

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Organska, organsko-mineralna in anorganska gnojila - Ugotavljanje prisotnosti enterokokov (Enterococaceae)

Organic, organo-mineral and inorganic fertilizers - Detection of Enterococaceae

Organische, organisch-mineralische und anorganische Düngemittel - Nachweis von Enterococaceae

Engrais organiques, organo-minéraux et inorganiques - Recherche des Enterococaceae

Ta slovenski standard je istoveten z: CEN/TS 17804:2022

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English Version

**Organic, organo-mineral and inorganic fertilizers -
Detection of *Enterococaceae***

Engrais organiques, organo-minéraux et inorganiques
- Recherche des *Enterococaceae*

Organische, organisch-mineralische und
anorganische Düngemittel - Nachweis von
Enterococaceae

This Technical Specification (CEN/TS) was approved by CEN on 13 April 2022 for provisional application.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
European foreword	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions.....	5
4 Principle.....	6
5 Reagents.....	7
5.1 General.....	7
5.2 Diluents	7
5.2.1 General.....	7
5.2.2 Basic phosphate buffer	7
5.2.3 Double-buffered phosphate buffer.....	7
5.3 Selective media.....	7
5.3.1 Slanetz Bartley agar	7
5.3.2 Bile Esculin Azide agar.....	8
6 Equipment and consumables	8
7 Sampling.....	9
8 Preparation of test sample	9
9 Procedure (see Figure A.1 in Annex A)	9
9.1 Preparation of the initial suspension and decimal dilutions.....	9
9.2 Inoculation and incubation	9
9.2.1 General.....	9
9.2.2 Procedure	10
9.3 Enumeration of colonies	10
9.4 Confirmation (optional)	10
9.4.1 General.....	10
9.4.2 Confirmation on the second selective medium.....	10
9.4.3 Catalase Test.....	11
10 Expression of results	11
11 Test report.....	12
Annex A (normative) Diagram of the procedure	13
Annex B (normative) Composition and preparation of culture media and reagents.....	14
B.1 General.....	14
B.2 Basic phosphate buffer	14
B.3 Double-buffered phosphate buffer	15
B.4 Slanetz Bartley agar	15
B.5 Bile Esculin Azide agar	16
Bibliography	17

European foreword

This document (CEN/TS 17804:2022) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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Introduction

This methodology has been developed to detect and enumerate *Enterococcaceae* in organic, organo-mineral and inorganic fertilizers in order to be able to control certain hygienic requirements in Regulation (EU) 2019/1009 [1].

Enterococcaceae in the sense of this document include several species of the genus *Enterococcus* (3.7, 3.8) with a faecal origin. Consequently, it can be used as an indicator of faecal contamination. It can also be used to monitor the effectiveness of pasteurization or disinfection treatments. Compared to *E.coli*, they have a higher tenacity and can therefore better reflect the behaviour of all pathogens in fertilizers.

Because of the large variety of fertilizers, this method is not appropriate in every detail for certain products. In this case, different methods which are specific to these products can be used if absolutely necessary for justified technical reasons. Nevertheless, every attempt should be made to apply this method as far as possible.

Mineral components in fertilizers can have a negative impact on the survivability of microorganisms when they go into solution. In addition to an unfavourable shift in the pH value, the products can have a strong osmotic effect or be toxic to cells themselves (e.g. copper). Therefore, it can be necessary to test the inhibitory effect of the fertilizers to be investigated in a pre-test.

The method is validated in an interlaboratory study for the following products (*Enterococcaceae* were investigated in both native and spiked test material):

Table 1 — Product groups and matrices for which the methods described in this method are applicable and tested in a validation trial

Product group	matrix
Organic fertilizers	to be determined at an international ring trial
Organo-mineral fertilizers	to be determined at an international ring trial
Inorganic fertilizers	to be determined at an international ring trial

International ring trials will be conducted on the basis of this document.

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