

Vplyv cementových výrobkov na pitnú vodu Skúšobné metódy Časť 2: Vplyv cementových materiálov aplikovaných na stavenisku a pridružených necementových výrobkov/materiálov na organoleptické vlastnosti a migráciu organických látok (TOC)

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InInfluence of cement based products on water intended for human consumption - Test methods - Part 2: Influence of site-applied cement based materials and associated non-cement based products/materials on organoleptic parameters and migration of organic substances (TOC)

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

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English Version

Influence of cement based products on water intended for human consumption - Test methods - Part 2: Influence of site-applied cement based materials and associated noncement based products/materials on organoleptic parameters and migration of organic substances (TOC)

Influence des produits à base de ciment sur l'eau destinée à la consommation humaine - Méthodes d'essai - Partie 2 : Influence des matériaux à base de ciment appliqués sur site et des produits/matériaux associés exempts de ciment sur les paramètres organoleptiques et la migration des substances organiques (COT)

Einfluss zementgebundener Produkte auf Wasser für den menschlichen Gebrauch - Prüfverfahren - Teil 2: Einfluss der Migration von bauseits angewendeten zementgebundenen Produkten und zugehörigen nicht zementgebundenen Produkten auf organoleptische Parameter

This European Standard was approved by CEN on 7 April 2025.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 28 May 2025.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 14944-2:2025) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2025, and conflicting national standards shall be withdrawn at the latest by November 2025.

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 describes a test method to determine the influence(s) of site-applied cement based materials and associated non-cement based products/materials on organoleptic parameters and the migration of organic substances (TOC) in water intended for human consumption.

This document will result in one of a series of standards that support standards for the approval of products and materials in contact with water intended for human consumption.

This document is part of a series dealing with the influence of cement based and associated non-cement based products/materials on water intended for human consumption, including:

- Part 1: Influence of factory-made cement based products on organoleptic parameters and migration of organic substances (TOC)
- Part 2: Influence of site-applied cement based materials and associated non-cement based products/materials on organoleptic parameters and migration of organic substances (TOC)
- Part 3: Migration of substances from factory-made cement based products.
- Part 4: Migration of substances from site-applied cement based materials and associated non-cement based products/materials.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies a method to determine the influence of site-applied cement based materials and associated non-cement based products/materials (including pre-packaged mortars) on the odour, flavour, colour, turbidity and total organic carbon (TOC) of test waters after contact with the products.

This document is applicable to site-applied or site-formed cement based materials intended to be used for the transport and storage of water intended for human consumption, including raw water used for the production of drinking water. It is also applicable to individual constituents of cement based products/materials and to associated non-cement based products/materials.

Site-applied or site-formed cement based materials which cannot be cast as cubes or prisms e.g. some spray applied systems, are tested as factory made cement based products according to EN 14944–1.

NOTE Tests with the specified test water will not necessarily be representative of materials used in different kinds of waters and especially very soft waters.

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 1420:2016, Influence of organic materials on water intended for human consumption — Determination of odour and flavour assessment of water in piping systems

EN 1484, Water analysis — Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)

EN 1622:2006, Water quality — Determination of the threshold odour number (TON) and threshold flavour number (TFN)

EN 10088-1:2023, Stainless steels — Part 1: List of stainless steels

EN 12390-1, Testing hardened concrete — Part 1: Shape, dimensions and other requirements for specimens and moulds

EN 14944-1, Influence of cementitious products on water intended for human consumption — Test methods - Part 1: Influence of factory made cementitious products on organoleptic parameters

EN 27888, Water quality — Determination of electrical conductivity (ISO 7888:1985)

EN ISO 7027-1, Water quality — Determination of turbidity — Part 1: Quantitative methods

EN ISO 7393-1, Water quality — Determination of free chlorine and total chlorine — Part 1: Titrimetric method using N,N-diethyl-1,4-phenylenediamine (ISO 7393-1)

EN ISO 7393-2, Water quality — Determination of free chlorine and total chlorine — Part 2: Colorimetric method using N,N-dialkyl-1,4-phenylenediamine, for routine control purposes (ISO 7393-2)

EN ISO 7887:2011, Water quality — Examination and determination of colour (ISO 7887:2011)

EN ISO 9963-2, Water quality — Determination of alkalinity — Part 2: Determination of carbonate alkalinity (ISO 9963-2)

EN ISO 10523, Water quality — Determination of pH (ISO 10523)

EN ISO 16264, Water quality — Determination of soluble silicates by flow analysis (FIA and CFA) and photometric detection (ISO 16264)

ISO 6058, Water quality — Determination of calcium content — EDTA titrimetric method

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