

**Tsementi sisaldavate toodete mõju
inimestele tarbimiseks mõeldud veele.
Katsemeetodid. Osa 1: Tehases valmistatud
tsementi sisaldavate toodete mõju
organoleptilistele omadustele**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14944-1:2006 sisaldab Euroopa standardi EN 14944-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.05.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14944-1:2006 consists of the English text of the European standard EN 14944-1:2006.</p> <p>This document is endorsed on 29.05.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies a method to determine the influence of factory made cementitious products on the odour, flavour, colour and turbidity of test waters after contact with the products. This European Standard is applicable to factory made cementitious products, e.g. cement mortar linings to metallic pipes, tanks, concrete pipes etc. intended to be used for the transport and storage of water for human consumption, including raw water used for the production of drinking water.</p>	<p>Scope:</p> <p>This European Standard specifies a method to determine the influence of factory made cementitious products on the odour, flavour, colour and turbidity of test waters after contact with the products. This European Standard is applicable to factory made cementitious products, e.g. cement mortar linings to metallic pipes, tanks, concrete pipes etc. intended to be used for the transport and storage of water for human consumption, including raw water used for the production of drinking water.</p>
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ICS 13.060.20, 67.250

Võtmesõnad:

English Version

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

Influence des produits à base de ciment sur l'eau destinée à la consommation humaine - Méthodes d'essai - Partie 1: Influence des produits à base de ciment fabriqués en usine sur les paramètres organoleptiques

Einfluss von zementgebundenen Produkten auf Wasser für den menschlichen Gebrauch - Prüfverfahren - Teil 1: Einfluss fabrikmäßig hergestellter zementgebundener Produkte auf organoleptische Parameter

This European Standard was approved by CEN on 13 February 2006.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Contents

	Page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Principle	8
5 Reagents	8
6 Apparatus	10
7 Samples and test pieces	11
8 Pre-treatment of samples (curing, preconditioning and disinfection)	13
9 Test procedure	14
10 Determination of odour as TON and flavour as TFN	14
11 Determination of colour and turbidity	15
12 Expression of results	15
13 Test report	15
Annex A (normative) Additional procedures for testing factory made pipes (cement mortar lined and concrete)	17
Annex B (normative) Additional procedures for testing factory made fittings (cement mortar lined and concrete)	21
Annex C (normative) Additional procedures for testing factory made storage systems (cement mortar, cement mortar lined and concrete)	26
Annex D (informative) Examples of typical test pieces and test conditions as a function of S/V ratio	31
Annex E (informative) Test arrangements for testing factory made cementitious products	35
Annex F (normative) Additional procedures for testing factory made cementitious products at elevated temperature	41
Annex G (informative) Discrimination between porous and non-porous coatings on factory made products	42
Annex H (informative) Schematic description of the test procedure	44
Bibliography	47

Foreword

This document (EN 14944-1:2006) 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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

It describes a test method to determine the influence(s) of factory made cementitious products on the organoleptic parameters of water intended for human consumption.

Annex A, which is normative, describes additional procedures for testing factory made pipes (cement mortar lined and concrete).

Annex B, which is normative, describes additional procedures for testing factory made fittings (cement mortar lined and concrete).

Annex C, which is normative, describes additional procedures for testing factory made storage systems (cement mortar, cement mortar lined and concrete).

Annex D, which is informative, provides examples of typical test pieces and test conditions as a function of S/V ratio.

Annex E, which is informative, describes test arrangements for testing factory made cementitious products

Annex F, which is normative, describes additional procedures for testing factory made cementitious products at elevated temperature.

Annex G, which is informative, provides a means of discriminating between porous and non-porous coatings on factory made products.

Annex H, which is informative, provides a schematic description of the test (preconditioning and migration) procedure.

This European Standard provides a bibliography.

This European Standard will result in one of a series of standards that support appropriate standards.

This European Standard is Part 1 of a series dealing with the influence of cementitious and associated non-cementitious products/materials on water intended for human consumption, including:

- Part 1: Influence of factory made cementitious products on organoleptic parameters
- Part 2¹: Influence of site-applied cementitious materials and associated non-cementitious products/materials on organoleptic parameters
- Part 3: Migration of substances from factory made cementitious products.
- Part 4²: Migration of substances from site-applied cementitious materials and associated non-cementitious products/materials.

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

¹ The work on Part 2 of EN 14944 has not yet begun.

² The work on Part 4 of EN 14944 has not yet begun.

Introduction

With respect to any potential adverse effects of products and materials on the quality of water intended for human consumption, it should be understood that relevant national regulations remain in force until verifiable European acceptance criteria are adopted.

1 Scope

This European Standard specifies a method to determine the influence of factory made cementitious products on the odour, flavour, colour and turbidity of test waters after contact with the products.

This European Standard is applicable to factory made cementitious products, e.g. cement mortar linings to metallic pipes, tanks, concrete pipes etc. intended to be used for the transport and storage of water for human consumption, including raw water used for the production of drinking water.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references the latest edition of the referenced document (including any amendments) applies.

EN 196-1, *Methods of testing cement — Part 1: Determination of strength*

EN 1622:1997, *Water analysis — Method for the determination of threshold odour number (TON) and threshold flavour number (TFN)*

EN 1015-2, *Methods of test for mortar for masonry — Part 2: Bulk sampling of mortars and preparation of test mortars*

EN 1015-11, *Methods of test for mortar for masonry — Part 11: Determination of flexural and compressive strength of hardened mortar*

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

EN 12350-1, *Testing fresh concrete — Part 1: Sampling*

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

EN 12390-2, *Testing hardened concrete — Part 2: Making and curing specimens for strength tests*

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

EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

EN ISO 7027:1999, *Water quality — Determination of turbidity (ISO 7027:1999)*

EN ISO 7887:1994, *Water quality — Examination and determination of colour (ISO 7887:1994)*

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 7393-1:1985)*

EN ISO 7393-2, *Water quality — Determination of free chlorine and total chlorine — Part 2: Colorimetric method using N, N-diethyl-1, 4-phenylenediamine for routine control purposes (ISO 7393-2:1985)*

EN ISO 9963-2, *Water quality — Determination of alkalinity — Part 2: Determination of carbonate alkalinity (ISO 9963-2:1994)*

EN ISO 16264, *Water quality — Determination of soluble silicates by flow analysis (FIA and CFA) and photometric detection (ISO 16264:2002)*

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

ISO 10523, *Water quality — Determination of pH*