Influence of materials on water intended for human consumption - Influence due to migration - Part 1: Test method for factory made products (except metallic and cementitious products)

Influence of materials on water intended for human consumption - Influence due to migration - Part 1: Test method for factory made products (except metallic and cementitious products)



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12873-1:2004 sisaldab Euroopa standardi EN 12873-1:2003 ingliskeelset teksti.

Käesolev dokument on jõustatud 20.02.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12873-1:2004 consists of the English text of the European standard EN 12873-1:2003.

This document is endorsed on 20.02.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

# Käsitlusala:

This European Standard specifies a procedure to determine the migration of substances from factory made or factory applied products (except metallic and cementitious products) for use in contact with water intended for human consumption. This standard is applicable to all products intended to be used under various conditions for the transport and storage of water intended for human consumption and raw water used for the manufacture of water intended for human consumption.

# Scope:

This European Standard specifies a procedure to determine the migration of substances from factory made or factory applied products (except metallic and cementitious products) for use in contact with water intended for human consumption. This standard is applicable to all products intended to be used under various conditions for the transport and storage of water intended for human consumption and raw water used for the manufacture of water intended for human consumption.

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ICS 13.060.20, 67.250

**Võtmesõnad:** definitions, fittings, influences, materials, metals, migration, pipes, potable water, service water, testing, tubes, water

# EUROPEAN STANDARD NORME EUROPÉENNE

EN 12873-1

EUROPÄISCHE NORM

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ICS 13.060.20; 67.250

### **English version**

Influence of materials on water intended for human consumption
- Influence due to migration - Part 1: Test method for nonmetallic and non-cementitious factory made products

Influence sur l'eau des matériaux en contact avec l'eau destinée à la consommation humaine - Influence de la migration - Partie 1: Méthode d'essai des matériaux de fabrication industrielle, excepté les matériaux métalliques et ceux à base de ciment

Einfluss von Bedarfsgegenständen auf Trinkwasser -Einfluss infolge der Migration - Teil 1: Prüfverfahren für nichtmetallische und nicht zementgebundene fabrikmäßig hergestellte Produkte

This European Standard was approved by CEN on 1 September 2003.

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 Management Centre 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 Management Centre has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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# **Foreword**

This document (EN 12873-1:2003) 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 May 2004, and conflicting national standards shall be withdrawn at the latest by May 2004.

It has been drawn up with the objective to describe a test method to determine the migration of substances from non-metallic and non-cementitious products for use in contact with water intended for human consumption.

Annex A, which is informative, describes an alternative arrangement for flushing pipes having a nominal size greater than DN 80.

Annex B, which is informative, describes additional procedures for testing non-homogeneous products and pipes having a nominal size greater than DN 80.

Annex C, which is informative, describes a schedule for the preparation of migration waters.

Annex D, which is informative, describes procedural tests using standard additions (positive controls).

Annex E, which is informative, describes the migration test procedure in a schematic manner.

This European Standard will be one of a series of standards on test methods which supports the appropriate standards.

This standard, part 1, is the first in a series of standards for dealing with the influence of migration from materials on water intended for human consumption, including:

- Part 1: Test method for non-metallic and non-cementitious factory made products;
- Part 2: Test method for non-metallic and non-cementitious site-applied materials;
- Part 3: Test method for ion exchange and absorbent resins;
- Part 4 : Test method for membrane water treatment systems.

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

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# Introduction

In respect of potential adverse effects on the quality of water intended for human consumption caused by the d the is remaind the state of t materials, it is called to mind that, while awaiting the adoption of verifiable European acceptance criteria, the relevant national regulations remain in force.

# 1 Scope

This European Standard specifies a procedure to determine the migration of substances from non-metallic and non-cementitious factory made or factory applied products for use in contact with water intended for human consumption.

This standard is applicable to products intended to be used under various conditions for the transport and storage of water intended for human consumption, including raw water used for the production of water intended for human consumption. It covers the extraction by water of substances from the finished products.

# 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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).

# 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

#### 3.1

#### test

technical operation that consists of the determination of one or more characteristics of a given product

# 3.2

#### test procedure

specified technical method for performing a test

# 3.3

#### test report

document that presents test results and other information relevant to a test

# 3.4

#### test laboratory

laboratory that performs tests

#### 3.5

#### product

manufactured item, in its finished form, that comes into contact with water intended for human consumption, or a component part of a manufactured item

### 3.6

# homogeneous product

product where the water contact surface is made from the same material as the remainder of the product

# 3.7

### non-homogeneous product

product where the water contact surface is made from a material that differs from those comprising the remainder of the product