

Influence of organic materials on water intended for human consumption — Organoleptic assessment of water in storage systems —

Part 1: Test method

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee EH/6, Effects of materials on water quality, which has the responsibility to:

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 14395-1:2004) 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of an identical text or by endorsement, at the latest by April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

The material-dependent parameters and/or performance requirements are incorporated into the Product Standards, for example the System Standards for storage 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

In respect of potential adverse effects on the quality of water intended for human consumption caused by the materials, it is recalled to mind that, while awaiting the adoption of verifiable European acceptance criteria, such as proposed in a future European Acceptance Scheme, national regulations remain in force.

1 Scope

This document specifies a test method for determining the organoleptic properties (odour, flavour, colour and turbidity) of test waters after their contact with products made from organic materials used in storage systems (tanks, reservoirs, ancillaries and their coatings both for factory and site applied products).

Products containing cementitious materials are not covered by this document.

The test method described in this standard is applicable to products to be used under various conditions for the storage of water intended for human consumption and raw water used for the manufacture of water intended for human consumption. Coatings or protective layers on products which are not intended to be in contact with these types of waters are not covered by this method.

This document specifies the test method comprising a set of procedures with and without a disinfection pretreatment and possible temperatures for the test waters. The use of the disinfection pretreatment and the choice of the test temperature are dependant on the relevant national regulations and/or the system or product standards.

2 Normative references

The following referenced documents are indispensable for the application 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 1622:1997, *Water analysis - Determination of the threshold odour number (TON) and threshold flavour number (TFN)*.

EN ISO 7393-2:2000, *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 7887:1994, *Water quality - Examination and determination of colour (ISO 7887:1994)*.

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

3 Terms and definitions

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

3.1 odour

organoleptic attribute perceptible by olfactory organ on sniffing certain volatile substances

[ISO 5492:1992]

3.2 flavour

complex combination of the olfactory, gustatory and trigeminal sensations perceived during tasting. The flavour may be influenced by tactile, thermal, painful and/or kinaesthetic effects

[ISO 5492:1992]

NOTE The term «taste» should not be used to designate the combination of gustatory, olfactory and trigeminal sensations which are designated by the term «flavour». If, in informal language, this term is used in this sense, it should always be associated with a qualifying term, e.g. musty taste, raspberry taste, corky taste.