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ICS 13.060.20

WATER TREATMENT MEMBRANES - INFLUENCE OF MATERIALS ON WATER INTENDED FOR HUMAN CONSUMPTION - TEST METHOD

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WORKSHOP AGREEMENT

CWA 14247

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ICS 13.060.20

Water treatment membranes - Influence of materials on water intended for human consumption - Test method

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Foreword

The need for a deliverable "Water membranes – Influence of materials on water intended for human consumption – Test method" was acknowledged by the CEN Workshop during its kick off Meeting held in Brussels on 1999-12-07.

The final review/endorsement round for this CWA was started at a meeting on 2001-04-05 and was successfully closed on the same day. The final text of this CWA was submitted to CEN for publication on 2001-06-29.

The document was initiated by the UK Drinking Water Inspectorate, in conjunction with WRc plc of the UK, NSF International of Belgium and KIWA N.V. of the Netherlands. The CWA was developed through the collaboration of a number of contributing partners in WS/001. WS/001 representation gathers a wide mix of interests, including testing laboratories, membrane manufacturers, water supply companies and water supply organizations.

Consensus was reached without substantial comment. The support was received from various European experts whose field of activities covered those areas given above.

A list of the company representatives who have supported the document 's content can be obtained from the CEN Management Centre.

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Contents

page

1 Scope **4**

2 Normative references **4**

3 Terms and definitions **4**

4 Symbols and abbreviations **6**

5 Test method **6**
5.1 Principle 6
5.2 Reagents and apparatus 6
5.2.1 General 6
5.2.2 Test water 6
5.2.3 Flushing water 6
5.2.4 Cleaning agent 7
5.2.5 Procedural blank 7
5.2.6 Test rig 7
5.3 Test samples 7
5.3.1 General requirements 7
5.3.2 Sample storage 8
5.3.3 Number of test samples 8
5.4 Procedure 8
5.4.1 Test temperature 8
5.4.2 Start up procedure 8
5.4.3 Leaching test 8
5.4.4 Cleaning and disinfection 10

6 Sample analysis **12**
6.1 General 12
6.2 TOC determination 12
6.3 General survey GC-MS 12
6.4 Odour and flavour assessment 12
6.5 Specific determinands 12

7 Expression of results **13**
7.1 Concentrations in the extracts 13
7.2 Normalised migration rates 13
7.2.1 Calculation based on concentrations in extracts from one-pass sampling, T1 to T3 13
7.2.2 Calculation based on concentrations in leachates after re-circulation, R1 and R2 13

8 Test report **14**

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1 Scope

This CWA describes a test method for laboratory evaluation of possible effects of water treatment membranes on drinking water quality, in particular the leaching of undesirable compounds from materials of the membrane and components of the membrane module.

It is applicable to microfiltration, ultrafiltration, nanofiltration, reverse osmosis and electrodialysis modules for use in the treatment of public water supplies.

Evaluation of the efficiency of the membrane filters in removing contaminants from the treated water is not included.

NOTE The method could also be applicable to point of use devices, but such products have not been considered.

2 Normative references

This Draft 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 draft only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 1622	*Water analysis - Determination of the threshold odour number (TON) and threshold flavour number (TFN).*
EN ISO 3696:1995	*Water for analytical laboratory use - Specification and test methods (ISO 3696:1987).*

3 Terms and definitions

For the purposes of this draft, the following terms and definitions apply:

3.1
analytical sample
portion of the extract collected for the determination of specified water quality parameters

3.2
cell pair
basic unit of ED or EDR systems consisting of a cation transfer membrane, a dilute flow (product) spacer, an anion transfer membrane and a concentrate (waste) spacer

3.3
electrodialysis
process that transfers ionic species from the feed water through cation and anion-specific membranes to a concentrate waste water stream by means of electrical driving force (direct current, DC)

3.4
feed water
inlet water for the test rig

3.5
leaching test
migration test
determination of the effects on parameters of water quality following contact with the test sample under specified conditions

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