Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity against Legionella of chemical disinfectants for aqueous systems - Test method and requirements (phase 2, step 1)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13623:2020 sisaldab Euroopa standardi EN 13623:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 13623:2020 consists of the English text of the European standard EN 13623:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.10.2020.	Date of Availability of the European standard is 28.10.2020.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity against Legionella of chemical disinfectants for aqueous systems - Test method and requirements (phase 2, step 1)

Antiseptiques et désinfectants chimiques - Essai quantitatif de suspension pour l'évaluation de l'activité bactéricide contre des légionelles des désinfectants chimiques pour les systèmes aqueux - Méthode d'essai et prescriptions (phase 2, étape 1)

Chemische Desinfektionsmittel und Antiseptika - Quantitativer Suspensionsversuch zur Bestimmung der bakteriziden Wirkung gegen Legionella von chemischen Desinfektionsmitteln für wasserführende Systeme - Prüfverfahren und Anforderungen (Phase 2, Stufe 1)

This European Standard was approved by CEN on 19 August 2019.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Turkey and United Kingdom.

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

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European foreword

This document (EN 13623:2020) has been prepared by Technical Committee CEN/TC 216 “Chemical disinfectants and antiseptics”, 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 2021, and conflicting national standards shall be withdrawn at the latest by April 2021.

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 supersedes EN 13623:2010.

This document was revised to adapt it to the latest state of CEN/TC 216, to correct errors and ambiguities. The following is a list of significant changes since the last edition:

— the temperature range for incubation of plates from (36 ± 1) °C or (37 ± 1) °C was changed to the range (36 ± 2) °C as given in the new ISO 11731 standard for *Legionella* culture;

— a new paragraph was added to the scope to state that the method is not suitable for continuously dosed products;

— new Annex A " Referenced strains in national collections" was added;

— the calculation errors in Table A.2 (now Table B.2) were corrected.

The changes mentioned above have no impact on the test results obtained with reference to the previous version. Those results are still valid.

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, Turkey and the United Kingdom.

Introduction

This European Standard specifies a suspension test for establishing whether a chemical disinfectant has a bactericidal activity against *Legionella pneumophila* in the fields described in the scope. This standard is specifically prepared for water treatment products, but it may also be possible to use it for other products.

Proliferation of *Legionella* only occurs in waters under certain conditions, and predominantly poses a risk when aerosolised. Many systems containing water do not require treatment. A decision to add chemical disinfectants to any water should be based on an appropriate assessment according to national regulations.

If the product complies with the requirements of this standard, it can be considered bactericidal against *Legionella pneumophila*, but it should not necessarily be inferred that the product is acceptable for a specific site of application without consideration of other relevant factors such as the pH, water, chemistry, temperature and degree of biological fouling at that site of application. It does not take into account the protective effect conveyed by biofilm on the organisms.

The conditions are intended to cover general purposes and to allow reference between laboratories and product types. Each concentration of the chemical disinfectant found by this test corresponds to defined experimental conditions. However, for some applications the recommendations of use of a product may differ and therefore additional test conditions need to be used.

1 Scope

This document specifies a test method and the minimum requirements for bactericidal activity of chemical disinfectant products intended to be used for treatment in aqueous systems against *Legionella pneumophila* that form a homogeneous, physically stable preparation when diluted with buffered ferrous hard water or hard water. Whenever *Legionella pneumophila* poses a risk to human health, this method is suitable for water used in cooling towers and water for general purposes, like spas, pools, showers and other uses. The method is not suitable for electro-chemical disinfection.

The document applies to products used as a single application shock treatment in order to kill *Legionella pneumophila.* It is not suitable for the evaluation of those products that are dosed continuously into water systems to control the growth of *Legionella pneumophila.*

NOTE 1 The method described is intended to determine the activity of commercial formulations or active substances under the conditions in which they are used.

NOTE 2 This method corresponds to a phase 2 step 1 test.

NOTE 3 This method does not take into account the fact that *Legionella pneumophila* is often found in cells of amoebae and/or biofilms and that thereby a product's activity against the bacteria may be reduced.

EN 14885 specifies in detail the relationship of the various tests to one another and to "use recommendation".

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 12353, *Chemical disinfectants and antiseptics — Preservation of test organisms used for the determination of bactericidal (including Legionella), mycobactericidal, sporicidal, fungicidal and virucidal (including bacteriophages) activity*

EN 14885, *Chemical disinfectants and antiseptics — Application of European Standards for chemical disinfectants and antiseptics*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14885 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

3.1
cooling water
water used to remove heat from a process or environment

3.2
water for general purposes
water used in premises other than water used as cooling water