STN	Chemické dezinfekčné a antiseptické prípravky Kvantitatívna suspenzná skúška na vyhodnotenie fungicídnej alebo kvasinkocídnej aktivity chemických dezinfekčných a antiseptických prípravkov používaných v potravinárstve,	STN EN 1650
	priemysle, domácnostiach a v inštitucionálnych oblastiach Skúšobná metóda a požiadavky (fáza 2, krok 1)	85 7015

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/19

Obsahuje: EN 1650:2019

Oznámením tejto normy sa ruší STN EN 1650+A1 (85 7015) z októbra 2013

129916

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2020 Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii.

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 1650

August 2019

ICS 71.100.35

Supersedes EN 1650:2008+A1:2013

English Version

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas - Test method and requirements (phase 2, step 1)

Antiseptiques et désinfectants chimiques - Essai quantitatif de suspension pour l'évaluation de l'activité fongicide ou levuricide des antiseptiques et des désinfectants chimiques utilisés dans le domaine de l'agro-alimentaire, dans l'industrie, dans les domaines domestiques et en collectivité - Méthode d'essai et prescriptions (phase 2, étape 1) Chemische Desinfektionsmittel und Antiseptika -Quantitativer Suspensionsversuch zur Bestimmung der fungiziden oder levuroziden Wirkung chemischer Desinfektionsmittel und Antiseptika in den Bereichen Lebensmittel, Industrie, Haushalt und öffentliche Einrichtungen - Prüfverfahren und Anforderungen (Phase 2, Stufe 1)

This European Standard was approved by CEN on 10 June 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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2019 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

STN EN 1650: 2020

EN 1650:2019 (E)

Contents

Europ	European foreword	
Introduction		5
1	Scope	6
2	Normative references	7
3	Terms and definitions	7
4	Requirements	7
5	Test method	
5.1	Principle	9
5.2	Materials and reagents	
5.2.1	Test organisms	10
5.2.2	Culture media and reagents	10
5.3	Apparatus and glassware	13
5.4	Preparation of test organism suspensions and product test solutions	14
5.4.1	Test organism suspensions (test and validation suspension)	14
5.4.2	Product test solutions	
5.5	Procedure for assessing the fungicidal or yeasticidal activity of the product	19
5.5.1	General	
5.5.2	Dilution-neutralization method	
5.5.3	Membrane filtration method	
5.6	Experimental data and calculation	
5.6.1	Explanation of terms and abbreviations	
5.6.2	Calculation	
5.7	Verification of methodology	
5.7.1	General	
5.7.2	Control of weighted mean counts	
5.7.2	Basic limits	
5.7.5 5.7.4	Microscopic observation	
5.7.4 5.8	Expression of results and precision	
5.o 5.8.1	Reduction	
	Control of active and non-active product test solution (5.4.2)	
5.8.2	1 ()	
5.8.3	Limiting test organism and fungicidal/yeasticidal concentration	
5.8.4	Precision, replicates	
5.9	Interpretation of results - conclusion	
5.9.1	General	
5.9.2	Fungicidal activity for general purposes	
5.9.3	Yeasticidal activity for general purposes	
5.9.4	Yeasticidal activity for hand hygiene	
5.10	Test report	30
Annex	A (informative) Referenced strains in national collections	32
Annex B (informative) Examples of neutralizers of the residual antimicrobial activity of		
	chemical disinfectants and antiseptics and rinsing liquids	33
Annex C (informative) Graphical representations of dilution-neutralization method and		
	membrane filtration method	35

Annex D (informative) Example of a typical test report	39
Annex E (informative) Precision of the test result	44
Bibliography	47

EN 1650:2019 (E)

European foreword

This document (EN 1650:2019) 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 February 2020 and conflicting national standards shall be withdrawn at the latest by February 2020.

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 1650:2008+A1:2013.

Data obtained by using the latest version of EN 1650:2008+A1:2013 are still valid.

The main changes in relation to EN 1650:2008+A1:2013 are:

- inclusion of hand hygiene;
- handrub and handwash test conditions and test requirements have been harmonized with EN 13624;
- interfering substance for breweries, soft drinks, cosmetics and cleaning in place have been deleted.
 A sentence to allow additional interfering substance for specific applications has been added;
- the obligatory conditions (temperature and contact time) have been deleted. The text has been harmonized with EN 13624 keeping specified time intervals and temperature steps.

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 describes a suspension test for establishing whether a chemical disinfectant or antiseptic has or does not have a fungicidal or yeasticidal activity in the fields described in the scope.

This laboratory test takes into account practical conditions of application of the product including contact time, temperature, test organisms and interfering substance, i.e. conditions which may influence its action in practical situations.

The conditions are intended to cover general purposes and to allow reference between laboratories and product types. Each utilization concentration of the chemical disinfectant or antiseptic 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 should be used.

EN 1650:2019 (E)

1 Scope

This document specifies a test method and the minimum requirements for fungicidal or yeasticidal activity of chemical disinfectant and antiseptic products that form a homogeneous, physically stable preparation when diluted with hard water or - in the case of ready-to-use-products - with water. Products can only be tested at a concentration of 80 % or less as some dilution is always produced by adding the test organisms and interfering substance.

This document applies to products that are used in food, industrial, domestic and institutional areas excluding areas and situations where disinfection is medically indicated and excluding products used on living tissues except those for hand hygiene in the above considered areas. The following areas are at least included:

- a) processing, distribution and retailing of:
 - 1) food of animal origin:
 - milk and milk products;
 - meat and meat products;
 - fish, seafood, and related products;
 - eggs and egg products;
 - animal feeds;
 - etc.
- b) institutional and domestic areas:
 - catering establishments;
 - public areas;
 - public transports;
 - schools;
 - nurseries;
 - shops;
 - sports rooms;
 - waste containers (bins ...);
 - hotels;
 - dwellings;
 - clinically non-sensitive areas of hospitals;
 - offices;
 - etc.

- 2) food of vegetable origin:
 - beverages;
 - fruits, vegetables and derivatives (including sugar, distillery ...);
 - flour, milling and baking;
 - animal feeds;
 - etc.

- c) other industrial areas:
 - packaging material;
 - biotechnology (yeast, proteins, enzymes, ...);
 - pharmaceutical;
 - cosmetics and toiletries;
 - textiles;
 - space industry, computer industry;
 - etc.

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

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

ISO 4793, Laboratory sintered (fritted) filters — Porosity grading, classification and designation

koniec náhľadu – text ďalej pokračuje v platenej verzii STN