Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area on nonporous surfaces without mechanical action - Test method and requirements St. 30 Colling October 1990 Oct (phase 2, step 2)



### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

	This Estonian standard EVS-EN 14349:2012 consists of the English text of the European standard EN 14349:2012.
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.
1	Date of Availability of the European standard is 14.11.2012.
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 <a href="mailto:standardiosakond@evs.ee">standardiosakond@evs.ee</a>.

ICS 71.100.35

#### Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; <a href="www.evs.ee">www.evs.ee</a>; telefon 605 5050; e-post <a href="mailto:info@evs.ee">info@evs.ee</a>

#### The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation: Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

# EUROPEAN STANDARD NORME EUROPÉENNE

## EN 14349

EUROPÄISCHE NORM

November 2012

ICS 71.100.35

Supersedes EN 14349:2007

#### **English Version**

Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action - Test method and requirements (phase 2, step 2)

Antiseptiques et désinfectants chimiques - Essai quantitatif de surface pour l'évaluation de l'activité bactéricide des antiseptiques et des désinfectants chimiques utilisés dans le domaine vétérinaire sur des surfaces non poreuses sans action mécanique - Méthode d'essai et prescriptions (phase 2, étape 2)

Chemische Desinfektionsmittel und Antiseptika -Quantitativer Oberflächenversuch zur Bestimmung der bakteriziden Wirkung chemischer Desinfektionsmittel und Antiseptika für den Veterinärbereich auf nicht-porösen Oberflächen ohne mechanische Wirkung - Prüfverfahren und Anforderungen (Phase 2, Stufe 2)

This European Standard was approved by CEN on 22 September 2012.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Cont		⊃age
Forewo	ord	3
	ıction	
4	Scope	
1	·	
2	Normative references	5
3	Terms and definitions	5
4	Requirements	5
5	Test method	
5.1	Principle	
5.2	Materials and reagents	
5.2.1	Test organisms	
5.2.2	Culture media and reagents	8
5.2.3	Test surface	
5.3	Apparatus and glassware	10
5.3.1	General	10
5.3.2	Usual microbiological laboratory equipment	
5.4	Preparation of test organism suspensions and product test solutions	
5.4.1	Test organism suspensions (test and validation suspension)	
5.4.2	Product test solutions	
5.5	Procedure for assessing the bactericidal activity of the product	
5.5.1	General	
5.5.1 5.5.2	Test procedure (Dilution-neutralization method)	
5.5.2 5.5.3	Observation of test surface agar	
5.5.5 5.6	Experimental data and calculation	
5.6.1	Explanation of terms and abbreviations	10
5.6.2	Calculation	
5.7	Verification of methodology	
5.7.1	General	
5.7.2	Control of weighted mean counts	
5.7.3	For each test organism check that:	
5.8	Expression of results and precision	
5.8.1	Reduction	
5.8.2	Control of active and non-active product test solution (5.4.2)	
5.8.3	Limiting test organism and bactericidal concentration	23
5.8.4	Precision, repetitions	
5.9	Interpretation of results - conclusion	23
5.9.1	General	23
5.9.2	Bactericidal activity for general purposes	23
5.9.3	Qualification for certain fields of application	
5.10	Test report	
Annex	A (informative) Referenced strains in national collections	26
	B (informative) Examples of neutralizers of the residual antimicrobial activity of chemical	
	disinfectants and antiseptics	27
Annex	C (informative) Graphical representation of the method	29
Annex	D (informative) Example of a typical test report	33
Riblion	ıranhv	36

### **Foreword**

This document (EN 14349:2012) 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 May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14349:2007.

Data obtained using the former version of EN 14349 may still be used.

It was revised to correct obvious errors and ambiguities, to harmonize the structure and wording with other tests of CEN/TC 216 (existing or in preparation), and to improve the readability of the standard and thereby make it more understandable.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, a, L. Switze. Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This European Standard specifies a surface test for establishing whether a chemical disinfectant or antiseptic has bactericidal activity in the area and 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 substances, 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 Jith.
I test t. corresponds to the chosen experimental conditions. However, for some applications, the instructions of use of a product may differ and therefore additional test conditions need to be used.

### 1 Scope

This European Standard specifies a test method and the minimum requirements for bactericidal 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.

This European Standard applies to products that are used in the veterinary area on non-porous surfaces without mechanical action i.e. in the breeding, husbandry, production, transport and disposal of all animals except when in the food chain following death and entry to the processing industry.

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

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 2 test.

This method cannot be used to evaluate the activity of products against mycobacteria.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, mycobactericidal, sporicidal and fungicidal 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 apply.

#### 4 Requirements

The product shall demonstrate at least a 4 decimal log (lg) reduction from a water control, when tested in accordance with Table 1 and Clause 5 under simulated low level (3,0 g/l bovine albumin) or high level soiling (10 g/l yeast extract and 10 g/l bovine albumin) on a surface.

9