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Title: Draft BS EN 17422 BS Chemical disinfectants and antiseptics - Quantitative surface test for the evaluation of test disinfectants used in the veterinary area - Test method and requirements (phase 2 step 2).

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Chemical disinfectants and antiseptics - Quantitative
surface test for the evaluation of teat disinfectants used in
the veterinary area - Test method and requirements
(phase 2 step 2)

Antiseptiques et désinfectants chimiques - Essai
quantitatif de surface pour l'évaluation des
désinfectants de trayons utilisés dans le domaine
vétérinaire - Méthode d'essai et prescriptions (phase 2,
étape 2)

Chemische Desinfektionsmittel und Antiseptika -
Quantitativer Oberflächenversuch zur Beurteilung von
Zitzendesinfektionsmittel für den Veterinärbereich -
Prüfverfahren und Anforderungen (Phase 2, Stufe 2)

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 216.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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European foreword

This document (prEN 17422:2024) has been prepared by Technical Committee CEN/TC 216 “Chemical disinfectants and antiseptics”, the secretariat of which is held by AFNOR.

This document will supersede EN 17422:2022.

This document was revised to harmonize the milk soiling levels, clarify terms and abbreviations and provide clearer definitions around the calculations.

Introduction

This document specifies a surface test for establishing whether a chemical disinfectant or antiseptic has a bactericidal 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 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 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 teat disinfectants that form a homogeneous, physically stable preparation when diluted with hard water or — in the case of ready-to-use products — with water.

This method applies to teat disinfectants that are used on teat skin without mechanical action as pre-milking and/or post-milking teat disinfectants in the veterinary area, e.g. in the breeding, husbandry, production, veterinary care facilities, transport and disposal of all animals except when in the food chain following death and entry into processing industry.

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.

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 apply.

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

- IEC Electromedical: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp/>

3.1 Symbols and abbreviated terms

<i>N</i>	Test suspension
<i>Na</i>	Test suspension + Interference substance
<i>Nv</i>	Validation suspension
<i>Nw</i>	Water control
<i>B</i>	Control B
<i>C</i>	Control C
<i>Vc</i>	Viable count
<i>NUw</i>	Used water
<i>NUd</i>	Used disinfectant
<i>Nws</i>	Water control surface
<i>Nts</i>	Test surface

4 Requirements

The product shall demonstrate at least a 4 decimal log (lg) (post-milking disinfectant) or 3 decimal log (lg) (pre-milking disinfectant) reduction from a water control, when tested in accordance with Table 1 and Clause 5 under simulated soiling (10,0 g/l skimmed milk for post-milking teat disinfectants, 3,0 g/l bovine albumin for pre-milking teat disinfectants).

Table 1 — Test Conditions

Test Conditions	Bactericidal activity on synthetic skin without mechanical action	
Minimum spectrum of test organisms	<i>Escherichia coli</i> <i>Staphylococcus aureus</i>	
Additional	Any relevant test organism	
Test temperature	30 °C ± 1 °C	
Contact time Minimum contact time	Pre-milking teat disinfectants 30 s ± 5 s	Post-milking teat disinfectants 1 min ± 5 s
Maximum contact time	Pre-milking teat disinfectants 3 min ± 10 s	Post-milking teat disinfectants 5 min ± 10 s
Other contact times may be selected at intervals of 30 s for contact times up to 1 min and at intervals of 1 min for contact times > 1 min		
Interfering substance Post-milking teat disinfectants Pre-milking teat disinfectants	10,0 g/l milk powder 3,0 g/l bovine albumin	

5 Test method

5.1 Principle

A test suspension of bacteria mixed with interfering substance (5.2.2.7) is inoculated onto a synthetic skin test surface and maintained at 30 °C for a period of conditioning.

After this conditioning time, the test surface is immersed in the product or dilutions of the product at 30 °C for 30 s soaking time, removed, and incubated at 30°C for the remaining defined period of time specified in Table 1. At the end of that contact time, the surface is transferred into neutralizer so that the action of the disinfectant is immediately neutralized. At the same time an aliquot of the used disinfectant is sampled and neutralized as well.

The bacteria are removed from the surface by ultrasound treatment. The numbers of surviving bacteria which can be recovered from the surface are determined quantitatively. The numbers of surviving bacteria in the used disinfectant are determined quantitatively.

The number of bacteria on a surface treated with water in place of the disinfectant is also determined and the reduction is calculated.

5.2 Materials and reagents

5.2.1 Test organisms

The bactericidal activity shall be evaluated using the following strains as test organisms: