

Chemical disinfectants and antiseptics — Basic fungicidal activity — Test method and requirements (phase 1)

The European Standard EN 1275 : 1997 has the status of a
British Standard

ICS 11.080

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents



Document Sharing Hub

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee IH/57, Chemical disinfectants and antiseptics, upon which the following bodies were represented:

- Association of British Health-care Industries
- Association of Public Analysts
- British Association for Chemical Specialities
- Campden and Chorleywood Food Research Association
- Consumer Policy Committee of BSI
- Department of Health
- Institute of Trading Standards Administration
- Ministry of Agriculture, Fisheries and Food
- Ministry of Defence
- Public Health Laboratory Service
- Society for Applied Bacteriology
- Society of Chemical Industry

This British Standard, having been prepared under the direction of the Health and Environment Sector Board, was published under the authority of the Standards Board and comes into effect on 15 September 1997

© BSI 1997

Amendments issued since publication

Amd. No.	Date	Text affected

The following BSI references relate to the work on this standard:
Committee reference IH/57
Draft for comment 93/509492 DC

ISBN 0 580 28335 6

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
Foreword	2
Text of EN 1275	3

National foreword

This British Standard has been prepared by Technical Committee IH/57 and is the English language version of EN 1275 : 1997 *Chemical disinfectants and antiseptics — Basic fungicidal activity — Test method and requirements (phase 1)* published by the European Committee for Standardization (CEN).

Cross-reference

International Standard	Corresponding British Standard
ISO 4793 : 1980	BS 1752 : 1983 <i>Specification of laboratory sintered or fritted filters including porosity grading</i> (Identical)

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16, an inside back cover and a back cover.

ICS 11.080

Descriptors: Disinfectants, chemical compounds, fungicides, tests, effectiveness, culture media, preparation, counting, micro-organisms, filtration analysis, neutralization analysis

English version

Chemical disinfectants and antiseptics — Basic fungicidal activity — Test method and requirements (Phase 1)

Antiseptiques et désinfectants chimiques —
Activité fongicide de base — Méthode d'essai et
prescriptions (phase 1)

Chemische Desinfektionsmittel und Antiseptika —
Fungizide Wirkung (Basistest) — Prüfverfahren und
Anforderungen (Phase 1)

This European Standard was approved by CEN on 1997-02-27. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

© 1997 Copyright reserved to CEN members

Foreword

This European Standard has been prepared by CEN Technical Committee 216, Chemical disinfectants and antiseptics, the secretariat of which is held by AFNOR.

A collaborative trial is currently being undertaken and will be used to provide a precision annex to this standard.

Other methods to evaluate the efficacy of chemical disinfectants and antiseptics for different fields of application are in preparation.

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 September 1997, and conflicting national standards shall be withdrawn at the latest by September 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Annex A is normative, annexes B, C, D, E and F are informative.

Contents

	Page
Foreword	2
Introduction	3
1 Scope	3
2 Normative references	3
3 Definitions	3
3.1 product (for chemical disinfection and/or antiseptics)	3
3.2 fungicide	3
3.3 fungicidal activity	3
4 Requirements	3
5 Test method	3
5.1 Principle	3
5.2 Materials and reagents	4
5.3 Apparatus and glassware	4
5.4 Preparation of fungal suspensions and test solutions	5
5.5 Procedure	6
5.6 Calculation and expression of results	8
5.7 Conclusion	9
5.8 Test report	9
Annexes	
A (normative) Validation of dilution-neutralization and membrane filtration methods	10
B (informative) Neutralizers	12
C (informative) Rinsing liquids	12
D (informative) Example of a typical test report	13
E (informative) Referenced strains in national collections	15
F (informative) Information on the application and interpretation of European Standards on chemical disinfectants and antiseptics	15

Introduction

This European Standard describes a suspension test method for establishing whether a chemical disinfectant or antiseptic has or does not have a fungicidal activity under the laboratory conditions defined by this European Standard. If a product complies with the test requirements, it can be considered as possessing a fungicidal activity. The acceptability of a product as a chemical disinfectant or antiseptic for a defined purpose cannot be determined from this test method. Chemical disinfectants and antiseptics are subjected to further testing by relevant tests according to European Standards to evaluate their activity under conditions appropriate to their intended use¹⁾.

There is no evidence that the strains used in this standard are virulent.

1 Scope

This European Standard specifies a test method (phase 1) and the minimum requirements for fungicidal activity of chemical disinfectant and antiseptic products that form a homogeneous physically stable preparation in water. This European Standard is applicable to products for use in agricultural (but not crop protection), domestic service, food hygiene and other industrial fields, institutional, medical and veterinary applications.

NOTE 1. Using this European Standard it is not possible to determine the fungicidal activity of the undiluted product as some dilution is always produced by adding the inoculum.

NOTE 2. This European Standard does not evaluate the activity of a product for an intended use. More specific test methods described in European Standards (see introduction) are used for further assessment of the efficacy of chemical disinfectants and antiseptics for a defined purpose.

NOTE 3. This method corresponds to a phase 1 test (see annex F).

2 Normative references

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

prEN 12353	<i>Chemical disinfectants and antiseptics — Preservation of microbial strains used for the determination of bactericidal and fungicidal activity</i>
ISO 4793	<i>Laboratory sintered (fritted) filters — Porosity grading, classification and designation</i>

3 Definitions

For the purposes of this European Standard the following definitions apply:

3.1 product (for chemical disinfection and/or antiseptics)

Chemical agent or formulation used as a chemical disinfectant or antiseptic [EN 1040].

3.2 fungicide

Product which kills fungi including their spores under defined conditions.

NOTE. The adjective derived from 'fungicide' is 'fungicidal'.

3.3 fungicidal activity

Capability of a product to produce a reduction in the number of viable vegetative yeast cells and mould spores of relevant organisms under conditions defined by this European Standard [EN 1275].

4 Requirements

The product, when tested in accordance with clause 5, shall demonstrate at least a 10⁴ logarithmic reduction in viable counts when the test organisms are vegetative cells of *Candida albicans* and the spores of *Aspergillus niger*.

5 Test method

5.1 Principle

5.1.1 A test suspension of yeast cells or mould spores is added to a prepared sample of the product under test. The mixture is maintained at 20 °C. At a specified contact time chosen from one of the following, 5 min ± 10 s, 15 min ± 10 s, 30 min ± 10 s or 60 min ± 10 s, an aliquot is taken; the fungicidal action in this portion is immediately neutralized or suppressed by a validated method. The method of choice is dilution-neutralization. If a suitable neutralizer cannot be found, membrane filtration is used. The number of surviving yeast cells or mould spores in each sample is determined and the reduction in viable counts calculated.

¹⁾ CEN/TC 216 will develop relevant tests.