Paints and varnishes - Laboratory method for testing the efficacy of film preservatives in a coating against fungi Ve 100 Oction Octobro Gales Oction Oc



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ICS 87.040

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## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

### EN 15457

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ICS 87.040

Supersedes EN 15457:2007

#### **English Version**

# Paints and varnishes - Laboratory method for testing the efficacy of film preservatives in a coating against fungi

Peintures et vernis - Méthode d'essai en laboratoire permettant de déterminer l'efficacité des préservateurs du feuil d'un revêtement contre les champignons Beschichtungsstoffe - Laborverfahren für die Prüfung der Wirksamkeit von Filmkonservierungsmitteln in einer Beschichtung gegen Pilze

This European Standard was approved by CEN on 10 July 2014.

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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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#### **Foreword**

This document (EN 15457:2014) has been prepared by Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by February 2015 and conflicting national standards shall be withdrawn at the latest by February 2015.

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.

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#### Introduction

This document identifies criteria to assess efficacy of film preservatives in a coating against fungi. The results of the method allow evaluation of an active substance with regard to its inclusion in Annex I of the Biocidal Products Directive 98/8/EC (Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market – BPD) or in the list of the Biocidal Product Regulation (BPR, Regulation (EU) 528/2012).

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Onment:

Once de la company de l The characteristics of the biocide treated coating material should conform to national regulations with regard to health, safety and the environment.

#### 1 Scope

This European Standard specifies a laboratory test method for determining the biocidal/biostatic efficacy of single active substances or combinations thereof used in film preservatives in a coating against fungal growth. This standard does not apply to coatings not susceptible to fungal growth. The test method comprises only active substances for film preservation, not the protection of the substrate itself, e.g. wood, which is dealt with in another standard. The test method is applicable for active substances used for wood and masonry coatings. It is not applicable to marine coatings.

Safety, health and environmental aspects are not in the scope of this standard.

Determination of the performance of film preservatives in coatings by applying ageing procedures is not within the scope of this standard.

#### 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 12469, Biotechnology - Performance criteria for microbiological safety cabinets

EN 16492:2014, Paints and varnishes - Evaluation of the surface disfigurement caused by fungi and algae on coatings

EN 23270, Paints and varnishes and their raw materials - Temperatures and humidities for conditioning and testing (ISO 3270)

EN ISO 1513, Paints and varnishes - Examination and preparation of test samples (ISO 1513)

#### 3 Terms and definitions

For the purposes of this document, the following term and definition applies.

#### 3.1

#### active substance

substance or micro-organism that has an action on or against harmful organisms

[SOURCE: Biocidal Product Regulation (BPR, Regulation (EU) 528/2012), Article 3.1 (c), modified – the article "a" between "or" and "micro-organism" was deleted]

#### 4 Principle

To determine the fungicidal efficacy of film preservatives in a coating, the coating material is applied to a substrate conditioned according to EN 23270, placed onto an agar surface, inoculated with a standard fungal spore suspension and incubated. Conclusions can be drawn to the fungicidal efficacy of the film preservatives in a coating from the intensity of the fungal growth on the surface of the specimen after incubation. The method described here is a semiquantitative, comparative method between coatings, with and without film preservatives.