

Wood preservatives - Determination of the protective effectiveness against *Anobium punctatum* (De Geer) by egg-laying and larval survival - Part 2: Application by impregnation (Laboratory method)

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 49-2:2015 sisaldab Euroopa standardi EN 49-2:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 49-2:2015 consists of the English text of the European standard EN 49-2:2015.
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English Version

Wood preservatives - Determination of the protective effectiveness against *Anobium punctatum* (De Geer) by egg-laying and larval survival - Part 2: Application by impregnation (Laboratory method)

Produits de préservation du bois - Détermination de l'efficacité protectrice vis à vis de *Anobium punctatum* (De Geer) par l'observation de la ponte et de la survie des larves - Partie 2 : Application par imprégnation (Méthode de laboratoire)

Holzschutzmittel - Bestimmung der vorbeugenden Wirkung gegenüber *Anobium punctatum* (De Geer) durch Beobachten der Eiablage und des Überlebens von Larven - Teil 2: Anwendung durch Volltränkung (Laboratoriumsverfahren)

This European Standard was approved by CEN on 16 July 2015.

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## European foreword

This document (EN 49-2:2015) has been prepared by Technical Committee CEN/TC 38 “Durability of wood and wood-based products”, 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of an identical text or by endorsement, at the latest by February 2016 and conflicting national standards shall be withdrawn at the latest by February 2016.

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 49-2:2005.

Significant technical differences between this document and EN 49-2:2005 are as follows:

- a) generalization of material for preparing the egg-laying zones;
- b) introduction of new harmonized specifications for wood quality.

EN 49, *Wood preservatives — Determination of the protective effectiveness against Anobium punctatum (De Geer) by egg-laying and larval survival*, consists of two parts:

- *Part 1: Application by surface treatment (Laboratory method)*;
- *Part 2: Application by impregnation (Laboratory method)*.

EN 49-1 is required to enable effectiveness assessments of wood preservatives which are intended to be applied by surface treatment and EN 49-2 those which are intended to be applied by impregnation.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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, 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 document describes a laboratory method of testing which gives a basis for assessment of the effectiveness of a wood preservative, against *Anobium punctatum*. It allows the determination of the concentration at which the product prevents the development of infestation from egg laying.

The method simulates conditions which can occur in practice on timber which has been treated some time previously with a deeply penetrating wood preservative and on which eggs of *Anobium punctatum* are laid.

This laboratory method provides one criterion by which the value of a product can be assessed. In making this assessment the methods by which the preservative may be applied should be taken into account. It is further recommended that results from this test should be supplemented by those from other appropriate tests, and above all by comparison with practical experience.

When products which are very active at low concentrations are used it is very important to take suitable precautions to isolate and separate, as far as possible, operations involving chemical products, other products, treated wood, laboratory apparatus and clothing. Suitable precautions should include the use of separate rooms, areas within rooms, extraction facilities, conditioning chambers and special training for personnel (see also Annex D for environmental, health and safety precautions).

## 1 Scope

This European Standard specifies a method for the determination of the protective effectiveness or the toxic values of a wood preservative against *Anobium punctatum* (De Geer) by egg-laying and larval survival in wood which has been treated previously by full impregnation. This method is applicable to:

- water-insoluble chemicals which are being studied as active insecticides;
- organic formulations, as supplied or as prepared in the laboratory by dilution of concentrates;
- organic water-dispersible formulations as supplied or as prepared in the laboratory by dilution of concentrates, and
- water-soluble materials, for example salts.

NOTE This method can be used in conjunction with an ageing procedure, for example EN 73.

## 2 Normative reference

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 ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **representative sample**

sample having its physical or chemical characteristics identical to the volumetric average characteristics of the total volume being sampled

### 3.2

#### **supplier**

sponsor of the test (person or company providing the sample of wood preservative to be tested)

## 4 Principle

The treated test specimens are exposed to gravid females of *Anobium punctatum*. The numbers of eggs laid, the numbers of eggs hatched, and the numbers of the surviving larvae are compared with those in untreated control test specimens. If the preservative has been prepared in the laboratory by dilution of a concentrate or by dissolution of a solid, the resulting attack is also compared to that in solvent or diluent treated control test specimens.

Depending on the test being carried out either

- on a set of test specimens of a susceptible wood species that is impregnated with a solution of the preservative, or