This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 1390:2020

Wood preservatives - Determination of the eradicant action against Hylotrupes bajulus (Linnaeus) larvae - Laboratory method

© CEN 2020 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN 1390:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:	*Published:*
EN 1390:2020	2020-04-08

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2020-04-26	71.100.50
	NOTE: If blank see CEN/CENELEC cover page

NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

National Foreword

I.S. EN 1390:2020 is the adopted Irish version of the European Document EN 1390:2020, Wood preservatives - Determination of the eradicant action against Hylotrupes bajulus (Linnaeus) larvae - Laboratory method

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1390

April 2020

ICS 71.100.50

Supersedes EN 1390:2006

English Version

Wood preservatives - Determination of the eradicant action against Hylotrupes bajulus (Linnaeus) larvae - Laboratory method

Produits de préservation du bois - Détermination de l'action curative contre les larves d'Hylotrupes bajulus (Linnaeus) - Méthode de laboratoire

Holzschutzmittel - Bestimmung der bekämpfenden Wirkung gegenüber Larven von Hylotrupes bajulus (Linnaeus) - Laboratoriumsverfahren

This European Standard was approved by CEN on 24 February 2020.

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

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2020 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 1390:2020 E

This is a free page sample. Access the full version online.

Contents

Page

European foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Principle 7

5 Test materials 7
5.1 Biological material 7
5.1.1 *Hylotrupes bajulus* (Linnaeus) larvae 7
5.1.2 Source of larvae 7
5.1.3 Provision of larvae 7
5.1.4 Choice of larvae 7
5.2 Products and reagents 8
5.3 Apparatus 8

6 Sampling 9

7 Test specimens 9
7.1 Species of wood 9
7.2 Wood quality 9
7.3 Provision of test specimens 9
7.4 Dimensions of test specimens 10
7.5 Number of test specimens 10
7.5.1 For fast and slow acting wood preservatives, test duration 12 weeks or 24 weeks 10
7.5.2 For deferred acting wood preservatives, test duration 52 weeks 10

8 Procedure 10
8.1 Preparation of the test specimens 10
8.2 Insertion of larvae into the test specimens 12
8.3 Sealing of the surfaces not to be treated 12
8.4 Incubation of the test specimens 12
8.5 Treatment of test specimens 12
8.5.1 Preparation of the treatment solution 12
8.5.2 Application of the treatment solution 13
8.6 Drying of the test specimens 13
8.7 Duration of test 14
8.8 Examination of the test specimens 14
8.8.1 Examination without radiography 14
8.8.2 Examination with radiography (optional) 15
8.8.3 Expression of examination 15

9 Validity of the test 15

10 Expression of results 15

11 Test report 16

This is a free page sample. Access the full version online.

Annex A (informative) **Example of a test report** 17

Annex B (informative) **Technique for culturing *Hylotrupes bajulus* (Linnaeus)** 19

B.1 General 19

B.2 Obtaining parent beetles 19

B.3 Mating 19

B.4 Egg-laying 19

B.5 Hatching of eggs 20

B.6 Larval development 20

B.7 Enemies and parasites 21

Annex C (informative) **Environmental, health and safety precautions within chemical/biological laboratory** 22

Bibliography 23

This is a free page sample. Access the full version online.

European foreword

This document (EN 1390:2020) 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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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

This document supersedes EN 1390:2006.

Significant technical differences between this document and EN 1390:2006 are as follows:

a) introduction of a definition for moribund larvae;

b) because of the changes in a) verification of the conditions of recovered larvae becomes needless and was deleted;

c) alternative coatings for sealing surfaces not to be treated may be used if they have no harmful effect to the test insects and if their performance as sealants has been documented;

d) the following note was added to 8.8 "Examination of the test specimens": It is useful to record the location (distance from the nearest treated surface) of all larvae recovered because it provides valuable information on penetration characteristic of the preservative.

NOTE Test results obtained according to earlier versions of this document and when the tests had started before this version of EN 1390 was published are considered as valid.

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

This is a free page sample. Access the full version online.

Introduction

This document describes a laboratory method of testing which gives a basis for the assessment of the eradicant action of fast and slow acting wood preservatives and of deferred acting wood preservatives against *Hylotrupes bajulus*. It allows determination of the lethal effect of a surface application of a preservative product on a population of larvae previously introduced into the test specimens.

The method simulates conditions in practice where a beam is treated, which is only slightly attacked and where cutting away has not exposed insect tunnels. This represents a severe test of the product.

In some particular instances, for example where the preservative is to be used on timbers of large dimensions, laminated beams, blockboard, plywood and other panel products, other test methods can be used to obtain complementary information on the effectiveness of the eradicant action of a product. Such methods lie outside the scope of this document.

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 that 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.

This is a free page sample. Access the full version online.

1 Scope

This document specifies a method for the determination of the eradicant action of a surface application of a fast and a slow acting wood preservative product or a deferred acting wood preservative product on solid wood infested with larvae of *Hylotrupes bajulus* (Linnaeus).

This method is applicable to:

— organic formulations, as supplied or as prepared in the laboratory by dilution of concentrates; or

— organic water-dispersible formulations, as supplied or as prepared in the laboratory by dilution of concentrates; or

— water-soluble products, for example, salts.

NOTE An ageing procedure cannot be combined with this method.

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

ISO 835:2007, *Laboratory glassware — Graduated pipettes*

3 Terms and definitions

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

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

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp/ui

3.1
moribund larva
larva that is in the state of inactivity or obsolescence due to exposure to the test product but which are considered alive after a specific test period

3.2
representative sample
sample with physical and/or chemical characteristics identical to the volumetric average characteristics of the total volume being sampled

[SOURCE: EN 1001-2:2005, 4.71]

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation