

## SLOVENSKI STANDARD SIST EN 84:2002

01-september-2002

BUXca Yý U. SIST EN 84:1996

NUý ]lbUgfYXglj U'nU`Yg'!'DcgdYýYbc'glUfUb'Y'nUý ]lhYbY[ U`YgU'dfYX'V]c`cý\_]adfYg\_i ýUb'Ya'!'DcglcdY\_']nd]fUb'U

Wood preservatives - Accelerated ageing of treated wood prior to biological testing - Leaching procedure

Holzschutzmittel - Beschleunigte Alterung von behandeltem Holz vor biologischen Prüfungen - Auswaschbeanspruchung (Standards.iteh.ai)

Produits de préservation du bois - Epreuves de vieillissement accéléré des bois traités avant essais biologiques Epreuve de délavage sist 25bf0b80-02c4-46cc-81dd-7df4dd9d76ce/sist-en-84-2002

Ta slovenski standard je istoveten z: EN 84:1997

ICS:

71.100.50 S^{ ã æþãb Á æÁ æz ãt Ár•æ Wood-protecting chemicals

SIST EN 84:2002 en

**SIST EN 84:2002** 

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 84:2002 https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-7df4dd9d76ce/sist-en-84-2002

**EUROPEAN STANDARD** 

**EN 84** 

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 1997

ICS 71.100.50

Supersedes EN 84:198

Descriptors:

wood preservatives, wood, artificial ageing tests, washing tests, effectiveness

English version

Wood preservatives - Accelerated ageing of treated wood prior to biological testing - Leaching procedure

Produits de préservation du bois - Epreuves de vieillissement accéléré des bois traités avant essais biologiques - Epreuve de délayage

n du bois - Epreuves de Holzschutzmittel - Beschleunigte Alterung von des bois traités avant behandeltem Holz vor biologischen Prüfungen - Auswaschbeanspruchung

(standards.iteh.ai)

SIST EN 84:2002

https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-7df4dd9d76ce/sist-en-84-2002

This European Standard was approved by CEN on 1996-12-25. 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.

The European Standards exist 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

#### **SIST EN 84:2002**

Page 2 EN 84:1997 Contents

Foreword		3
1	Scope	
2	Normative reference	
3	Principle	
4	Material and apparatus	4 A
5	Test specimens	
6	Procedure	
7	Destination of the test specimens after the leaching procedure	
8	Test report	

## iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 84:2002</u> https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-7df4dd9d76ce/sist-en-84-2002

#### Foreword

This European Standard has been prepared by Technical Committee CEN/TC 38 "Durability of wood and derived materials", the Secretariat of which is held by AFNOR.

This European Standard supersedes EN 84:1989.

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

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 84:2002 https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-7df4dd9d76ce/sist-en-84-2002 Page 4 EN 84:1997

#### 1 Scope

This European Standard specifies a method for the leaching of test specimens of wood which are used in the testing of the biological efficacy of wood preservatives.

This standard is applicable to:

- a) the pre-conditioning of test specimens prior to their being subjected to a biological test; or
- b) assessment of loss of effectiveness by comparing the performance in a biological test of treated test specimens subjected to this procedure with others that have not undergone any leaching procedure.

NOTE: The method may also be used for pre-conditioning of wood-based panel products which may or may not have received preservative treatment.

#### 2 Normative reference

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.

EN ISO 3696

Water for analytical laboratory use - Specification and test methods https://discolor.org/htms/lSQi3696i1987alog/standards/sist/25bf0b80-02c4-46cc-81dd-

144449d76ce/sist-en-84-2002

#### 3 Principle

Impregnation with water under vacuum, followed by immersion in water for a specified period, of test specimens that have been prepared for biological testing of the efficacy of a wood preservative against fungi or insects, using the appropriate standard methods.

#### 4 Material and apparatus

#### 4.1 Material

Water, complying with grade 3 of EN ISO 3696.

#### 4.2 Apparatus

- **4.2.1 Conditioning chamber** controlled at a temperature of  $(20 \pm 2)$  °C and  $(65 \pm 5)$  % relative humidity for conditioning the test specimens.
- 4.2.2 Test vessels of material that does not react with the preservative under test:
  - either of glass, especially for the organic solvent products;

The capacity of the test vessels shall be such that they can contain, in addition to the test specimens, the volume of water specified in 6.1.2.

- 4.2.3 Vacuum desiccator, fitted with a stopcock.
- **4.2.4 Vacuum pump** fitted with a pressure gauge and capable of maintaining a pressure of 4 kPa.
- **4.2.5 Weights**, of a material which does not react with the treated blocks, water or the test vessel, for ballasting the test specimens.
- 4.2.6 Ordinary laboratory equipment.
- 5 Test specimens
- 5.1 Definition and origin

The test specimens and their preparation are defined in the standards concerning the biological tests to which they are intended to be subjected. PREVIEW

The leaching procedure shall be carried out at the end of the conditioning period that follows the treatment of the test specimens described in the relevant biological test standard.

SIST EN 84:2002

https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-

5.2 Number of test specimens 4dd9d76ce/sist-en-84-2002

The number of test specimens to be leached shall be as required by the standard describing the relevant biological tests, bearing in mind that the leaching procedure shall be applied both to treated test specimens that are subjected to biological agents and to control test specimens. The control test specimens are of the following kinds:

- treated test specimens that are not be subjected to attack by biological agents after leaching. These will serve as controls for changes in mass in those tests in which this factor is taken into consideration. One set of these control test specimens shall be provided for each concentration;
- untreated control test specimens which, after leaching, are subjected to the biological tests to check any variation in the behaviour of untreated wood. One set of these control test specimens shall be provided for the whole of one test;
- control test specimens of timber treated with solvent or diluent if necessary.

Page 6 EN 84:1997

- 6 Procedure
- 6.1 Leaching

#### 6.1.1 Impregnation with water

Place the test specimens in the test vessels (see 4.2.2) so that the test specimens of different species of wood and with different concentrations of a wood preservative are in separate test vessels. Ballast them with weights (see 4.2.5) to prevent them from floating. Pour sufficient water (see 4.1) into the test vessels to cover the groups of test specimens and to ensure that the test specimens remain covered throughout the impregnation.

Place the test vessels in the vacuum desiccator (see 4.2.3); establish a vacuum corresponding to a pressure of 4 kPa and maintain this for 20 min before release.

Leave the test specimens in the vessels for 2 h.

Empty the water from the vessels.

#### 6.1.2 Immersion in water

Refill each vessel with fresh water (see 4.1) to a ratio of approximately five volumes of water to one volume of wood (e.g. 100 ml of water per test specimen of 50 mm x 25 mm x 15 mm).

NOTE: It is not necessary to continue to ballast the test specimens as they will not float after the impregnation procedure. This may not apply if panel product test specimens are being processed.

SISTEN 842002

https://standards.iteh.ai/catalog/standards/sist/25bf0b80-02c4-46cc-81dd-

Allow the test specimens to remain immersed in water for 14 days at the temperature specified (see 4.2.1) with nine changes of the water as follows.

- change the water at the end of the first and second day of immersion;
- change the water a further seven times in the remaining 12 days at intervals of not less than one day and not more than three days.

#### 6.2 Drying

Stand the test specimens in the conditioning chamber (see 4.2.1), on one of their narrow sides on a non-absorbent support of a material which does not react with the treated test specimens and taking care to leave a gap of at least 10 mm between individual test specimens, allowing a free flow of air around the test specimens.

Allow the test specimens to stand for at least two weeks or until constant mass i.e. until two consecutive weighings 24 h apart are the same  $\pm$  0,1 g.