PD CEN/TS 16663:2016

BSI Standards Publication

# Durability of wood and wood-based products — Determination of emissions from preservative treated wood to the environment — Wooden commodities exposed in Use Class 3 (Not covered, not in contact with the ground) — Semi-field method

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## National foreword

This Published Document is the UK implementation of CEN/TS 16663:2016. It supersedes PD CEN/TR 16663:2014 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/515, Wood preservation.

A list of organizations represented on this committee can be obtained on request to its secretary.

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

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Published by BSI Standards Limited 2016

ISBN 978 0 580 93210 6
ICS 13.020.30; 71.100.50

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 December 2016.

## Amendments/corrigenda issued since publication

| Date | Text affected |
|---|---|

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TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

# CEN/TS 16663

November 2016

ICS 13.020.30; 71.100.50

Supersedes CEN/TR 16663:2014

English Version

# Durability of wood and wood-based products - Determination of emissions from preservative treated wood to the environment - Wooden commodities exposed in Use Class 3 (Not covered, not in contact with the ground) - Semi-field method

Durabilité du bois et des matériaux dérivés du bois - Détermination des émissions dans l'environnement du bois traité avec des produits de préservation - Produits de base en bois exposés à la classe d'emploi n° 3 (dans un endroit abrité, n'étant pas en contact avec le sol) - Méthode semi-terrain

Dauerhaftigkeit von Holz und Holzprodukten - Abschätzung von Emissionen von mit Holzschutzmitteln behandeltem Holz an die Umwelt - Holzprodukte in Gebrauchsklasse 3 (nicht abgedeckt, ohne Erdkontakt) - Semi-Feldverfahren

This Technical Specification (CEN/TS) was approved by CEN on 22 August 2016 for provisional application.

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## European foreword

This document (CEN/TS 16663:2016) has been prepared by Technical Committee CEN/TC 38 "Durability of wood and wood-based products", the secretariat of which is held by AFNOR.

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.

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# Introduction

The leaching from preservative treated wood into the environment needs to be quantified to enable an environmental risk assessment to be made of the treated wood, e.g. according to the Biocidal Products Regulation, 528/2012. This document describes a semi-field method for the determination of leachate from preservative treated wood where the preservative treated wood is not covered and not in contact with the ground or water (use class 3 according to EN 335).

The method is a semi-field procedure for obtaining water samples (leachate) from treated wood exposed out of ground contact, during natural exposure. The quantities of emissions in the leachate are related to the surface area of the wood and can be used in scenarios for the environmental risk assessment of the treated wood.

NOTE The leachate can also be tested for eco-toxicological effects (example: OECD 202 testing on *Daphnia* sp.).



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# 1 Scope

This Technical Specification specifies a method for determining the leaching of active ingredients or other compounds from treated wood by a semi-field method for use class 3 (outdoor above ground). The preservative treated wood can be tested with or without subsequently surface coating or other water-repellent treatment. The method is applicable to the testing of commercial or experimental preservatives or paint systems applied to timber by methods appropriate to commercial practice.

# 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 ISO 5667-3, *Water quality - Sampling - Part 3: Preservation and handling of water samples (ISO 5667-3)*

# 3 Description of the test method

## 3.1 Principle

Panels are treated, assembled and placed outdoors, out of ground contact and exposed to the normal environmental and ecological factors which affect preservative treated wood so exposed in practice. The rainwater is retained and the leachate is monitored by chemical analyses of the active ingredients and/or other compounds.

## 3.2 Quality criteria

The validity of the analytical method for the substances in question should be determined before conducting the test:

a) accuracy;

b) specificity;

c) limit of detection (LOD);

d) limit of quantification (LOQ);

e) precision.

NOTE 1 EN ISO 5667-3 may give guidance on the preservation and handling of water samples.

NOTE 2 This may include CAS no or chemical formulation.

## 3.3 Wood preservative

The test report shall state the name and other designation of the tested product, and the trade or common name of the active ingredient(s) as defined in the regulation n°528/2012.

Use of a coating is possible (identity and amount of coating used shall be stated in the test report).



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