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Dentistry - Polymerization shrinkage: Method for determination of polymerization shrinkage of polymer-based restorative materials (ISO 17304:2013)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN ISO 17304:2013, ISO 17304:2013

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 17304

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ICS 11.060.10

English Version

Dentistry - Polymerization shrinkage: Method for determination of polymerization shrinkage of polymer-based restorative materials (ISO 17304:2013)

Médecine bucco-dentaire - Rétraction à la polymérisation: Méthode de détermination de la rétraction à la polymérisation des matériaux de restauration à base de polymères (ISO 17304:2013)

Zahnheilkunde - Polymerisationsschrumpfung: Verfahren zur Bestimmung der Polymerisationsschrumpfung von polymerbasierenden Restaurationsmaterialien (ISO 17304:2013)

This European Standard was approved by CEN on 2 November 2013.

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Foreword

This document (EN ISO 17304:2013) has been prepared by Technical Committee ISO/TC 106 “Dentistry” in collaboration with Technical Committee CEN/TC 55 “Dentistry” 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of an identical text or by endorsement, at the latest by June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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The text of ISO 17304:2013 has been approved by CEN as EN ISO 17304:2013 without any modification.

INTERNATIONAL STANDARD

ISO 17304

First edition
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Dentistry — Polymerization shrinkage: Method for determination of polymerization shrinkage of polymer-based restorative materials

Médecine bucco-dentaire — Rétraction à la polymérisation: Méthode de détermination de la rétraction à la polymérisation des matériaux de restauration à base de polymères

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Foreword

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The committee responsible for this document is ISO/TC 106, *Dentistry*, Subcommittee SC 1, *Filling and restorative materials*.

Introduction

This International Standard specifies a test method for the determination of the polymerization shrinkage of external energy-activated polymer-based restorative materials of Class 2, Group 1 (see ISO 4049) and similar core materials.

Many test methods have been used over many years to determine this property but no International Standard test has so far been adopted. The method specified herein is a simple method that provides reproducible results that will aid users in the comparison of test data. It was developed and verified by a comprehensive interlaboratory test programme comparing it with other methods.

INTERNATIONAL STANDARD **ISO 17304:2013(E)**

Dentistry — Polymerization shrinkage: Method for determination of polymerization shrinkage of polymer-based restorative materials

1 Scope

This International Standard specifies a test method for the measurement of the polymerization shrinkage of external energy-activated polymer-based restorative materials such as composites and core materials.

The method is not suitable for Class 1 (self-curing, see ISO 4049) polymer-based restorative materials.

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.

ISO 1183-1, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pyknometer method and titration method*

ISO 1942, *Dentistry — Vocabulary*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 4049, *Dentistry — Polymer-based restorative materials*

ISO 10650 (all parts), *Dentistry — Powered polymerization activators*

