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**Dentistry — Zinc oxide-eugenol  
cements and non-eugenol zinc oxide  
cements**

*Médecine bucco-dentaire — Ciments à l'oxyde de zinc-eugénol et à  
l'oxyde de zinc sans eugénol*



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ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

<b>Foreword</b>	<b>iv</b>
<b>Introduction</b>	<b>v</b>
<b>1 Scope</b>	<b>1</b>
<b>2 Normative references</b>	<b>1</b>
<b>3 Terms and definitions</b>	<b>1</b>
<b>4 Classification</b>	<b>1</b>
<b>5 Requirements</b>	<b>1</b>
5.1 Performance requirements	1
5.2 Biocompatibility	2
<b>6 Sampling</b>	<b>2</b>
<b>7 Test methods</b>	<b>2</b>
7.1 Preparation of test specimens	2
7.1.1 Ambient conditions	2
7.1.2 Procedure for mixing	2
7.2 Determination of setting time	2
7.2.1 Apparatus	2
7.2.2 Procedure	3
7.2.3 Treatment of results	3
7.3 Determination of compressive strength	3
7.3.1 Apparatus	3
7.3.2 Preparation of test specimens	5
7.3.3 Procedure	5
7.3.4 Treatment of results	6
7.4 Determination of film thickness	6
7.4.1 Apparatus	6
7.4.2 Procedure	6
7.4.3 Treatment of results	6
7.5 Determination of acid-soluble arsenic fraction	7
7.5.1 Preparation of test sample	7
7.5.2 Procedure	8
7.5.3 Compliance	8
<b>8 Marking, labelling and packaging</b>	<b>8</b>
8.1 Packaging	8
8.2 Marking and instructions for use	8
<b>Bibliography</b>	<b>10</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 1, *Filling and restorative materials*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 55, *Dentistry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fifth edition cancels and replaces the fourth edition (ISO 3107:2011), of which it constitutes a minor revision.

- replace “zinc oxide/eugenol cement” with “zinc oxide-eugenol cement”,
- replace “non-eugenol cement” with “non-eugenol zinc oxide cement”, and
- replace “aromatic oils” with “oil(s) other than eugenol”.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Specific qualitative and quantitative requirements for freedom from biological hazard are not included in this document, but it is intended that in assessing possible biological or toxicological hazards, reference be made to ISO 10993-1 and ISO 7405.



# Dentistry — Zinc oxide-eugenol cements and non-eugenol zinc oxide cements

## 1 Scope

This document specifies requirements for zinc oxide-eugenol cements suitable for use in restorative dentistry for temporary cementation, for bases and as temporary restorations.

This document also specifies requirements for non-eugenol zinc oxide cements containing zinc oxide and oil(s) other than eugenol for temporary cementation.

## 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.

ISO 1942, *Dentistry — Vocabulary*

ISO 2590, *General method for the determination of arsenic — Silver diethyldithiocarbamate photometric method*

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

ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1942 apply.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

## 4 Classification

For the purposes of this document, the following classification for cements is used, based on their intended use:

- a) Type I: for temporary cementation;
- b) Type II: for bases and temporary restorations.

## 5 Requirements

### 5.1 Performance requirements

When tested in accordance with the appropriate test methods specified in [Clause 7](#), Type I and Type II cements shall comply with the performance requirements specified in [Table 1](#).