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

Médecine bucco-dentaire — Ciments dentaires à base d'oxyde de zinc-eugénol et à base d'oxyde de zinc sans eugénol



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	1
5 Requirements	1
5.1 Performance requirements	1
5.2 Biocompatibility	2
6 Sampling	2
7 Test methods	2
7.1 Preparation of test specimens	2
7.2 Determination of setting time	2
7.3 Determination of compressive strength	3
7.4 Determination of film thickness	6
7.5 Determination of acid-soluble arsenic fraction	8
8 Marking, labelling and packaging	8
8.1 Packaging	8
8.2 Marking and instructions for use	8
Bibliography	10

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 3107 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 1, *Filling and restorative materials*.

This fourth edition cancels and replaces the third edition (ISO 3107:2004), which has been technically revised. It also incorporates the Technical Corrigendum ISO 3107:2004/Cor.1:2006.

The main changes are that the

- a) classification types have been consolidated into two,
- b) compressive strength limit has been reduced to reflect materials in current use,
- c) text on interpretation of compressive test results has been modified, and
- d) lower setting time limit has been lowered to reflect materials in current use.

Introduction

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

This document is a preview generated by EVS

This document is a preview generated by EVS

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

1 Scope

This International Standard specifies requirements for non-water-based zinc oxide/eugenol cements suitable for use in restorative dentistry for temporary cementation, for bases and as temporary restorations.

This International Standard also specifies requirements for non-eugenol cements containing zinc oxide and aromatic oils suitable for temporary cementation.

2 Normative references

The following referenced documents are indispensable for the application 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, *Water for analytical laboratory use — Specification and test methods*

ISO 8601, *Data elements and interchange formats — Information interchange — Representation of dates and times*

3 Terms and definitions

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

4 Classification

For the purposes of this International Standard, 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.