# **INTERNATIONAL STANDARD**



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

enta. e d'oxy. Art dentaire — Ciments dentaires à base d'oxyde de zinc-eugénol et à



Reference number ISO 3107:2004(E)

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# 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 third edition cancels and replaces the second edition (ISO 3107:1988), which has been technically revised, including extensive revision and simplification of the classification system, and removal of the disintegration limit as a requirement for temporary cements.

## Introduction

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

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

### Scope 1

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

This International Standard is also applicable to non-eugenol cements containing zinc oxide and aromatic oils suitable for temporary cementation.

### Normative references 2

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

### Classification 3

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

- a) Type I: for temporary cementation;
  - 1) Class 1: setting cement;
  - 2) Class 2: non-setting cement.
- b) Type II: for permanent cementation;
- c) Type III: for bases and temporary restorations;
- d) Type IV: for cavity liners.