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Dentistry — Ceramic materials

Art dentaire — Produits céramiques



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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

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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 6872 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 2, *Prosthetic materials*.

This third edition cancels and replaces the second edition (ISO 6872:1995) and Amendment 1:1997 which have been technically revised.

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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 — Ceramic materials

1 Scope

This International Standard specifies the requirements and the corresponding test methods for dental ceramic materials for fixed all-ceramic and metal-ceramic restorations and prostheses.

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

3 Terms and definitions

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

3.1 Material

3.1.1

addition ceramic

dental ceramic material that is fired at a reduced temperature and is normally applied to restore contact points on a dental restoration or prosthesis

3.1.2

dental ceramic

inorganic, non-metallic material that is specifically formulated for use, when processed according to manufacturer's instructions, to form the whole or part of a dental restoration or prosthesis

3.1.3

dental porcelain

predominantly glassy dental ceramic material used mainly for aesthetics in a dental restoration or prosthesis

3.1.4

dentine ceramic

dental ceramic material used to form the overall shape and basic colour of a dental restoration or prosthesis, simulating the natural tooth dentine

3.1.5

enamel ceramic

dental ceramic material used to overlay either partially or wholly the dentine ceramic and also to form the more translucent incisal third of a dental restoration or prosthesis, simulating the natural tooth enamel