



SLOVENSKI STANDARD
SIST EN ISO 1562:2004
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Zobozdravstvo – Odlitki iz zlitin zlata (ISO 1562:2004)

Dentistry - Casting gold alloys (ISO 1562:2004)

Zahnheilkunde - Goldgusslegierungen (ISO 1562:2004)

Art dentaire - Alliages d'or a couler (ISO 1562:2004)

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ICS:

11.060.10 Zlato in zlitine Dental materials

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 1562

May 2004

ICS 11.060.10

Supersedes EN ISO 1562:1995

English version

Dentistry - Casting gold alloys (ISO 1562:2004)

Art dentaire - Alliages d'or à couler (ISO 1562:2004)

Zahnheilkunde - Goldgusslegierungen (ISO 1562:2004)

This European Standard was approved by CEN on 8 April 2004.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 1562:2004 (E)**Foreword**

This document (EN ISO 1562:2004) 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of an identical text or by endorsement, at the latest by November 2004, and conflicting national standards shall be withdrawn at the latest by November 2004.

This document supersedes EN ISO 1562:1995.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 1562:2004 has been approved by CEN as EN ISO 1562:2004 without any modifications.

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INTERNATIONAL STANDARD

**ISO
1562**

Fourth edition
2004-05-01

Dentistry — Casting gold alloys

Art dentaire — Alliages d'or à couler

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ISO 1562:2004(E)**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 1562 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 2, *Prosthetic materials*.

This fourth edition cancels and replaces the third edition (ISO 1562:1993), which has been technically revised, including the following changes:

- a) bench-cooling replaces softening and hardening heat treatments of test specimens;
- b) introduction of upper limits for beryllium and cadmium;
- c) introduction of electrochemical testing (potentiodynamic test).

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Introduction

Dental casting alloys with noble metal content of at least 25 % (mass fraction) but less than 75 % (mass fraction) are addressed in ISO 8891.

Dental casting alloys intended solely as the substructure of a metal-ceramic dental restorative system and also dual-purpose casting gold alloys having at least 75 % (mass fraction) noble metal content are addressed in ISO 9693.

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Dentistry — Casting gold alloys

1 Scope

This International Standard gives the classification of, and specifies requirements for, dental casting gold alloys with at least 60 % mass fraction of gold and at least 75 % mass fraction of gold plus specified platinum group metals (platinum, palladium, iridium, ruthenium and rhodium). Test methods are given for providing information on corrosion resistance, tarnish resistance and electrochemical behaviour.

This International Standard is applicable to casting alloys suitable for the fabrication of dental restorations and appliances without ceramic veneer.

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 3585, *Borosilicate glass 3.3 — Properties*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*
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ISO 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ISO 6892, *Metallic materials — Tensile testing at ambient temperature*

ISO 9693, *Metal-ceramic dental restorative systems*

ISO 10271, *Dental metallic materials — Corrosion test methods*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

bench-cooling

process whereby a casting is retained in its investment with exposed metal uppermost and placed on a flat, insulating surface in freely circulating air until its temperature falls to ambient

3.2

dual-purpose casting gold alloy

casting gold alloy, in accordance with this International Standard, that is also intended for use as the substructure of a metal-ceramic dental restorative system in accordance with ISO 9693

3.3

primary pack

container that comes in direct contact with the casting gold alloy