



SLOVENSKI STANDARD
SIST EN ISO 9917-2:2000
01-julij-2000

Dental water-based cements - Part 2: Light-activated cements (ISO 9917-2:1998)

Dental water-based cements - Part 2: Light-activated cements (ISO 9917-2:1998)

Zahnärztliche wasserhärtende Zemente - Teil 2: Lichtaktivierte Zemente (ISO 9917-2:1998)

Ciments dentaires hydrauliques - Partie 2: Ciments photo-actives (ISO 9917-2:1998)

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Ta slovenski standard je istoveten z: EN ISO 9917-2:1999

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ICS:

11.060.10 Z[à[c @ ã } ã æ | ã ã Dental materials

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

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English version

Dental water-based cements - Part 2: Light-activated cements
(ISO 9917-2:1998)

Ciments dentaires hydrauliques - Partie 2: Ciments photo-activés (ISO 9917-2:1998)

Zahnärztliche wasserhärtende Zemente - Teil 2: Lichtaktivierte Zemente (ISO 9917-2:1998)

This European Standard was approved by CEN on 23 July 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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EN ISO 9917-2:1999

Foreword

The text of the International Standard from Technical Committee ISO/TC 106 "Dentistry" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 55 "Dentistry", the secretariat of which is held by DIN.

This European Standard replaces EN 29917:1994.

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 February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

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

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Endorsement notice
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The text of the International Standard ISO 9917-2:1998 has been approved by CEN as a European Standard without any modification.

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NOTE: Normative references to International Standards are listed in annex ZA (normative).

Annex ZA (normative)**Normative references to international publications
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN</u> | <u>Year</u> |
|--------------------|-------------|--|-------------|-------------|
| ISO 3696 | 1987 | Water for analytical laboratory use - Specification and test methods | EN ISO 3696 | 1995 |
| ISO 7491 | 1985 | Dental materials - Determination of colour stability of dental polymeric materials | EN 27491 | 1991 |
| ISO 9917 | 1991 | Dental water-based cements (Technical Corrigendum 1) | EN 29917 | 1994 |

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INTERNATIONAL STANDARD

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Dental water-based cements — Part 2: Light-activated cements

Ciments dentaires hydrauliques —

Partie 2: Ciments photo-activés

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Reference number
ISO 9917-2:1998(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.

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.

International Standard ISO 9917-2 was prepared by Technical Committee ISO/TC 106, *Dentistry*, Subcommittee SC 1, *Filling and restorative materials*.

ISO 9917 consists of the following parts, under the general title *Dental water-based cements*:

- *Part 1*: (at present ISO 9917:1991)
- *Part 2*: *Light-activated cements*.

Annex A of this part of ISO 9917 is for information only.

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Introduction

This part of ISO 9917 has been prepared in order to present the requirements and test methods for water-based cements in which setting is activated by an external radiation source. Some products which fall within the scope of this part of ISO 9917 may also have a second mode of activation.

As far as possible, test methods employed within this part of ISO 9917 have been harmonized with those used in ISO 4049 and ISO 9917:1991.

NOTE — Existing standard ISO 9917:1991 will become ISO 9917-1 on revision.

Specific qualitative and quantitative requirements for freedom from biological hazard are not included in this part of ISO 9917, but it is recommended that when assessing possible biological or toxicological hazards reference be made to ISO 10993-1 and ISO 7405.

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Dental water-based cements —

Part 2: Light-activated cements

1 Scope

This part of ISO 9917 specifies requirements for dental cements, including hand-mixed, encapsulated cements used for mechanical mixing and one-component materials, which are intended for base, lining and restoration purposes and for which the materials are water-based and set by multiple reactions which include an acid-base reaction and polymerization.

EXAMPLE Conventional glass polyalkenoate cements are normally formed by reacting an ion-leachable aluminosilicate glass with a polyalkenoic acid in an aqueous environment. Materials which fall within the scope of this part of ISO 9917 will normally be able to effect setting by such an aqueous acid-base type reaction, but in addition will be able to effect rapid setting through exposure to a suitable source of radiation.

NOTE — Attention of manufacturers and test houses is drawn to the closely related International Standards ISO 4049 and ISO 9917:1991. Consideration should be given as to the most appropriate International Standard by which to evaluate any individual product.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9917. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9917 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3665:1996, *Photography — Intra-oral dental radiographic film — Specification.*

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

ISO 7491:1985, *Dental materials — Determination of colour stability of dental polymeric materials.*

ISO 9917:1991, *Dental water-based cements.*

3 Definitions

For the purposes of this part of ISO 9917, the definitions given in ISO 9917:1991 and the following definitions apply.

3.1 setting time

(in the absence of activating radiation) period of time, measured from start of mixing, until the completion of set as defined in 7.3.1.