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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 30367-2013

Replacing GB 30367-2013

Dentistry - Ceramic materials

牙科学 陶瓷材料

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1. Structure and drafting rules for standardization documents"

Drafting.

This document replaces GB 30367-2013 "Dental ceramic materials". Compared with GB 30367-2013, except for structural adjustments and editorial

In addition to the modifications, the main technical changes are as follows.

--- Changed the terms and definitions (see 3.1, 3.2, 3.3, 3.1, 3.2, 3.3 of the.2013 edition);

--- Changed the description of ceramic classification (see Table 1, Table A.1, Table 1, Table A.1 of the.2013 edition);

- Deleted "biocompatibility" in the requirements (see 5.5 of the.2013 edition);
- Added the requirements for the expression of "shrinkage factor" (see 5.5);
- Changed the description of sampling of porcelain powder with various colors (see 6.1, 6.1 of the.2003 edition);
- Deleted "When using gamma-spectroscopy technology, attention should be paid to eliminating interference" (see 7.2.2 of the.2013 edition);
- The measurable load range has been changed (see 7.3.2.1.1, 7.3.3.1.1, 7.3.2.1.1, 7.3.3.1.1 of the.2013 edition);
- Increased the accuracy of span measurement (see 7.3.2.1.2.1, 7.3.2.1.2.2);
- Change "flexural strength test fixture" to "bending test fixture" (see 7.3.2.1.2, 7.3.2.1.2 of the.2013 edition);
- For thin specimens, the requirements for the size of small thickness specimens are added (see 7.3.2.2.1.1);
- Added recommendations on specimen grinding direction and timing (see 7.3.2.2.1.1);
- Sample preparation Added the suggestion of longitudinal grinding, deleted the "sinter the sample under vacuum and in air at one atmosphere for at least

1 time." (7.3.2.2.2 of the.2013 edition);

- Added formula (3) and notes (see 7.3.2.4.2);
- Deleted the specific conditions for sintering the specimens due to the specimen size requirements (see 7.3.3.2.1 of the.2013 edition);
- Added conditions for testing "fired" specimens (see 7.3.2.2.2, 7.3.2.2.3, 7.3.3.2.1, 7.3.3.2.2);
- Added "For materials whose linear expansion coefficient is not affected by multiple firings, multiple firings are not necessary" (see 7.4.2);
- Change the starting temperature of thermal expansion measurement from "starting from 25 °C" to "starting from 25 °C or 50 °C" (see 7.4.3, 7.4.3 of the.2013 edition);
- Change the measurement range of linear expansion coefficient from "25°C~500°C" to "25°C~500°C or 50°C~500°C" [see 7.4.3, 7.4.4, 8.2.2d) of the.2013 edition];
- The precision of the total surface area of the sample is relaxed, and it is changed from one container to one or more containers (see 7.6.4, 7.6.4 of the.2013 edition);
- Added calculation formula (5) (see 7.6.5);

- Increased cooling rate [see 8.1.2a)];
- Added recommendations for the treatment of partially sintered ceramics and glass ceramics that require further heat treatment (see 8.1.3);
- Increased the number of measurement units for prefabricated ceramic sheets or ceramic blocks [see 9.2.1e)];
- Increased the shrinkage factor of some sintered ceramic materials [see 9.2.2c)];

This document is equivalent to ISO 6872:2024 "Ceramic materials for dentistry".

Introduction

This document does not include specific qualitative and quantitative requirements for the absence of biological hazards, but recommends that

When, refer to ISO 10993-1 and ISO 7405.

Dental ceramic materials

1 Scope

This document specifies requirements, recommendations and describes relevant test methods for dental ceramic materials.

This document applies to ceramic materials for making dental fixed all-ceramic and metal-ceramic restorations and restorative devices.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to

This document.

ISO 1942 Dentistry-Vocabulary

Note: GB/T 9937-2020 Dental terminology (ISO 1942:2009, MOD)

and test methods)

Note: GB/T 6682-2008 Specifications and test methods for water used in analytical laboratories (ISO 3696:1987, MOD)

ISO 13078 Dentistry - Dental furnace- Test method for temperature measurement using