American National Standard/
American Dental Association
Specification No. 25

Dental
Gypsum
Products

Identical adoption of ISO 6873:1998
Revised American Dental Association Specification No. 25 for Dental Gypsum Products has been approved by the Council on Scientific Affairs of the American Dental Association. This and other specifications for dental materials, instruments and equipment are being formulated by subcommittees of the ADA Standards Committee on Dental Products (formerly Accredited Standards Committee MD156 on Dental Materials, Instruments and Equipment). The committee has representation from all interests in the United States in the standardization of materials, instruments and equipment in dentistry. The Council has adopted the specifications, showing professional recognition of their usefulness in dentistry, and has forwarded them to the American National Standards Institute with a recommendation that the specifications be approved as American National Standards. Approval of ADA Specification No. 25 as an American National Standard was granted by the American National Standards Institute on March 23, 2000.

The Council thanks the working group members and the organizations with which they were affiliated at the time the specification was developed: Atul Sarma (Chairman), Whip Mix Corporation, Louisville, KY; Carlos Munoz (Secretary), Loma Linda University, Loma Linda, CA; Dennis Davis, University of California, San Francisco; Waldemar DeRijk, BISCO, Inc., Schaumburg, IL; Fred Eichmiller, National Institute of Standards and Technology, Gaithersburg, MD; Abdul Khan, CMP Industries, Albany, NY; Daniel Menis, Harry J. Bosworth Co., Skokie, IL; Carl Panzera, American Thermocraft, Somerset, NJ; and Nikhil Sarkar, Louisiana State University, New Orleans.
American National Standard/American Dental Association
Specification No. 25 for Dental Gypsum Products

Foreword
(This foreword does not form a part of the Revised ANSI/ADA Specification No. 25 for Dental Gypsum Products)

This revision is an adoption of the International Organization for Standardization (ISO) Standard 6873:1998 for Dental Gypsum Products. The ASC MD156 Working Group examined the standard and found it acceptable for adoption as ANSI/ADA Specification No. 25.
1. **SCOPE**

   This national standard gives a classification and specifies requirements for dental gypsum products used for dental purposes, such as making oral impressions, molds, casts or dies. It specifies the test methods to be employed to determine compliance with these requirements. It also includes requirements for the labeling of packaging and for adequate instructions to accompany each package.

2. **NORMATIVE REFERENCE**

   The following standard contains provisions which, through reference in this text, constitute provisions of the national standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this national standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of International Electrotechnical Commission (IEC) and ISO maintain registers of currently valid international standards.

   ISO 3696:1987 Water for Analytical Laboratory Use—Specification and Test Methods

3. **DEFINITION**

   For the purposes of this national standard, the following definition applies:

   **3.1 Dental Gypsum Product**

   Dental product composed essentially of hemihydrate of calcium sulfate and any necessary modifiers.

   **Note 1:** Coloring matter and flavoring, if present, are regarded as necessary modifiers.

4. **CLASSIFICATION AND DESIGNATION**

   The five types of gypsum product used in dentistry are classified in accordance with this national standard:

   **Type 1:** Dental plaster, impression
   **Type 2:** Dental plaster, model
   **Type 3:** Dental stone, model
   **Type 4:** Dental stone, die, high strength, low expansion
   **Type 5:** Dental stone, die, high strength, high expansion

5. **REQUIREMENTS**

   5.1 **Quality**

   The material shall be uniform and free from foreign matter and lumps, and when mixed according to the manufacturer’s instructions shall produce a homogeneous mix.

   5.2 **Fluidity at Pouring Time (Type 1 Materials Only)**

   When tested according to Clause 7.2 at a pouring time of 1.25 min, the fluidity of Type 1 materials shall be equal to or greater than 70 mm.