American National Standard/
American Dental Association
Specification No. 4

Dental
Inlay
Casting
Wax
AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION SPECIFICATION NO. 4 FOR DENTAL INLAY CASTING WAX

The Council on Scientific Affairs of the American Dental Association has reaffirmed American Dental Association Specification No. 4 for Dental Inlay Casting Wax. This and other specifications for dental materials, instruments and equipment are being formulated by working groups of the ADA Standards Committee on Dental Products (formerly Accredited Standards Committee MD156 for 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. The American National Standards Institute reaffirmed ADA Specification No. 4 as an American National Standard on August 1, 2003. This standard becomes effective August 1, 2004.

The Council thanks the working group members and the organizations with which they were affiliated at the time the specification was developed:

John Powers (Chairman), University of Texas Health Science Center, Houston, TX; Lonnie Graybill, Miltex Instrument Co., York, PA; Atul Sarma, Whip-Mix Corporation, Louisville, KY.
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FOREWORD

(This foreword does not form a part of ANSI/ADA Specification No. 4 for Dental Inlay Casting Wax).

Changes in the fourth Revision of ANSI/ADA Specification No. 4 and rationale for these changes are:

1 Change

Waxes will be classified as Type I (direct technique wax) and Type II (indirect technique wax) in Revision 4. This change represents a return to the classification used in Revision 2.

Rationale: In Revision 3, waxes are classified as Types A, B, and C, or hard, medium and soft. In a survey of manufacturers of dental waxes conducted by the subcommittee, it was observed that only one responding company was producing a Type A (hard) wax. That wax was not certified. From a survey of dental schools conducted by the subcommittee, it was observed that only one of the schools was using a Type A wax. That wax was conducted by the subcommittee, it was observed that only one of the schools was using a Type A wax. The surveys clearly demonstrated that waxes were being sold and used as indirect or direct technique waxes, not as hard, medium or soft waxes. The subcommittee believes the classification of Type I (direct technique wax) and Type II (indirect technique wax) is more representative of usage of the inlay waxes.

2 Change

The flow requirements of Revision 4 will be returned to those described by Revision 2.

Rationale: The flow requirements for waxes were changed in Revision 3 to correspond to the new classification system of Types A, B and C. With the deletion of Type A (hard) wax and the return to Types I and II (presently, Types B and C), the flow requirements of Revision 2 are reasonable. A survey of flow values of 8 waxes from 4 manufacturers indicated that among 4 Type B or Type I waxes, the same two passed and the same two failed both Revisions 3 and 4. Among 4 Type C or Type II waxes, 3 passed Revision 4 whereas only 2 passed Revision 3. The wax that passed Revision 4 but not Revision 3 is a commercially successful product. The subcommittee unanimously supports a return to flow values of Revision 2 as now described in Revision 4.
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1 SCOPE AND CLASSIFICATION

1.1 Scope
This specification is for inlay casting wax used in making patterns in the production of inlays and crowns. The wax consists essentially of natural and synthetic waxes, resins, and hydrocarbons of the paraffin series.

1.2 Types and Classes
Inlay casting wax covered by this specification shall be of the following types and classes:

Type I. Direct technique wax
   Class 1 Sticks
   Class 2 Cones
   Class 3 Other shapes

Type II. Indirect technique wax
   Class 1 Sticks
   Class 2 Cones
   Class 3 Other shapes

2 APPLICABLE SPECIFICATIONS

2.1 Specifications
There are no other specifications applicable to this specification. (Copies of ANSI/ADA Specifications may be obtained from the American Dental Association, Dept. of Standards Administration, 211 E. Chicago Avenue, Chicago, IL 60611).

3 REQUIREMENTS

3.1 Uniformity
The wax shall be uniform and free of foreign materials.

3.2 Size
Sizes shall be as specified by the purchaser.

3.3 Color
The color of the wax should be the color specified on the package.