



American National Standard/
American Dental Association
Standard No. 141

Dental Duplicating Material

Identical adoption of ISO 14356:2003, *Dentistry — Duplicating Material*.

ADA American
Dental
Association®
Council on
Scientific Affairs

**AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 141
FOR DENTAL DUPLICATING MATERIAL**

The Council on Scientific Affairs of the American Dental Association has approved revised American Dental Association Standard No. 141 for Dental Duplicating Material. This and other standards 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 standards, showing professional recognition of their usefulness in dentistry, and has forwarded them to the American National Standards Institute with a recommendation that the standards be approved as American National Standards. The American National Standards Institute granted approval of ADA Standard No. 141 as an American National Standard on February 19, 2013.

The ADA Standards Committee on Dental Products thanks the members of Working Group 2.10 and the organizations with which they were affiliated at the time the standard was developed:

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**AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 141 FOR DENTAL
DUPLICATING MATERIAL**

FOREWORD

(This Foreword does not form a part of ANSI/ADA Standard No. 141 for Dental Duplicating Material).

This standard is an identical adoption of ISO 14356:2003, *Dentistry – Duplicating material*. ADA SCDP Working Group No. 2.10 on Impression Materials examined the international standard and found it acceptable for identical adoption as ANSI/ADA Standard No. 141.

AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 141 FOR DENTAL DUPLICATING MATERIAL**1 SCOPE**

This standard specifies requirements and tests for the duplicating materials used in dentistry which are primarily intended for forming flexible molds needed to produce positive refractory investment copies of properly blocked-out master models.

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 1942 (all parts), *Dental vocabulary*

ISO 6873, *Dental gypsum products*

ISO 7490, *Dental gypsum-bonded casting investments*

ISO 9694, *Dental phosphate-bonded casting investments*

ISO 11245, *Dental restorations — Phosphate-bonded refractory die materials*

ISO 11246, *Dental ethyl silicate bonded casting investments*

(ISO standards for dentistry are available from the American Dental Association, Department of Standards, 211 E. Chicago Ave., Chicago, IL 60611 or www.adacatalog.org).

3 TERMS AND DEFINITIONS

For the purposes of this document, the terms and definitions given in ISO 1942 and the following apply.

3.1 block out

to flow or mold waxes and/or materials such as cements, clays and polymeric materials into undercut areas on a master model, and then shape them so as to leave only those undercuts that are essential to the subsequent steps in producing a prosthesis that will fit and function optimally

NOTE A blocked-out master model may also include other surface modifications needed relative to construction of a prosthesis.

3.2 double boiler

container system, usually in three parts, in which the upper container fits into the lower container such that boiling water in the lower container heats the contents of the lid-covered upper container

3.3 duplicating material

elastic material used to make flexible negative copy impressions or molds of objects (models or casts) into which a mix of a refractory investment, or another mixture intended for a similar purpose, can be poured to produce a positive copy of the original object

3.4 non-reversible duplicating material

material which converts from a pourable consistency to a gel or rubber-like state and which thereafter cannot be returned to the pourable consistency for repeated use