



American National Standard/
American Dental Association
Standard No. 167

Test Methods for Dental Unit Waterline Biofilm Treatment

Identical adoption of ISO 16954:2015, *Dentistry — Test methods for dental unit waterline biofilm treatment*

ADA American
Dental
Association®

Standards Committee on Dental Products

2018

This is a preview of "ANSI/ADA 167-2018". [Click here to purchase the full version from the ANSI store.](#)

**AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION
STANDARD NO. 167 FOR TEST METHODS FOR DENTAL UNIT WATERLINE
BIOFILM TREATMENT**

The ADA Standards Committee on Dental Products (SCDP) has approved ANSI/ADA Standard No. 167 for Test Methods for Dental Unit Waterline Biofilm Treatment. This and other standards for dental materials, instruments and equipment are being formulated by working groups of the ADA SCDP. The Committee has representation from all interests in the United States in the standardization of materials, instruments and equipment in dentistry. The Committee 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. 167 as an American National Standard on May 18, 2018.

The ADA Standards Committee on Dental Products thanks the members of Working Group 6.48 on Air and Water Treatment Systems, and the organizations with which they were affiliated at the time the standard was developed:

Shannon Mills (chairman), Previser Corp., Concord, NH;
Satish Alapati, University of Illinois at Chicago;
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**AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 167 FOR
TEST METHODS FOR DENTAL UNIT WATERLINE BIOFILM TREATMENT**

FOREWORD

(This Foreword does not form a part of ANSI/ADA Standard No. 167 for Test Methods for Dental Unit Waterline Biofilm Treatment).

This standard is an identical adoption of ISO 16954:2015, Dentistry – Test method for dental unit waterline biofilm treatment. ADA SCDP Working Group 6.48 on Air and Water Treatment Systems examined the international standard and found it acceptable for identical adoption as ANSI/ADA Standard No. 167. This standard cancels and replaces ANSI/ADA Standard No. 137:2014 for Essential Characteristics of Test Methods for the Evaluation of Treatment Methods Intended to Improve or Maintain the Microbiological Quality of Dental Unit Procedural Water.

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AMERICAN NATIONAL STANDARD/AMERICAN DENTAL ASSOCIATION STANDARD NO. 167 FOR TEST METHODS FOR DENTAL UNIT WATERLINE BIOFILM TREATMENT

1 Scope

This standard provides type test methods for evaluating the effectiveness of treatment methods intended to prevent or inhibit the formation of biofilm or to remove biofilm present in dental unit procedural water delivery systems under laboratory conditions.

This standard does not apply to devices intended to deliver sterile procedural water or sterile solution. It also does not apply to lines, tubing, or hoses that deliver compressed air within the dental unit.

This standard does not establish specific upper limits for bacterial contamination or describe test methods to be used in clinical situations. It also does not establish test methods for evaluating any deleterious side effects potentially caused by treatment methods.

The test methods provided in this standard can be used to test other dental equipment that delivers non-sterile water to the oral cavity.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1942, *Dentistry — Vocabulary*

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

ISO 7494-1, *Dentistry — Dental units — Part 1: General requirements and test methods*

ISO 7494-2, *Dentistry — Dental units — Part 2: Water and air supply*

ISO 10523, *Water quality — Determination of pH*

ISO 19458, *Water quality — Sampling for microbiological analysis*

IEC 60601-1, *Medical electrical equipment — Part 1: General requirements for basic safety and essential performance*

ISO and IEC standards are available from the American National Standards Institute, 25 W. 43rd St., New York, NY 10036 or www.ansi.org).

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60601-1, ISO 1942, ISO 7494-1, and ISO 7494-2 and the following apply.

3.1

biofilm

structured community of microorganisms inhabiting a self-developed extracellular biopolymeric matrix attached to a surface