

Australian Standard[®]

**DENTAL EQUIPMENT—
TOOTHBRUSHES**

The Tariffs, Instruments, Materials and Equipment Committee of the Australian Dental Association has adopted this standard for use in connection with its program for accreditation of certified dental products, lists of which are published periodically. Enquiries regarding this program should be addressed direct to the Australian Dental Association. When used in connection with the program, the standard is known as Australian Dental Standard (ADS) 1032—1985.

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The following interests are represented on Committee DN/13:

- Australian Chamber of Commerce
 - Australian Federation of Consumer Organizations
 - Australian Dental Association
 - Australian Dental Standards Laboratory
 - Australian Dental Trade Association
 - Australian Retailers Association
 - Confederation of Australian Industry
 - Cosmetic, Toiletry and Fragrance Association of Australia
 - Dental Health Education and Research Foundation
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This standard is listed in the Index of Australian Defence Specifications and Standards for use by the Department of Defence.

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PREFACE

This edition of this standard was prepared by the Association's Committee on Oral Hygiene Agents and Devices under the direction of the Dental Materials and Equipment Standards Committee to supersede AS 1032—1981. The standard is one of a series intended for use in assessing the quality of dental goods used in Australia. This standard applies to manually operated toothbrushes in general use in the home.

In this edition account has been taken of requirements in AS 1032—1981.

This edition differs from the 1981 edition in that the requirement for fastening of tufts has been lowered from 25 N to 15 N, the clause relating to depth of tuft holes has been clarified and an additional marking requirement has been included. The lowering of the requirement for tuft anchorage was made as the previous value was considered to be higher than necessary for its intended purpose.

Facilities for testing toothbrushes for compliance with this standard are available at the Australian Dental Standards Laboratory, 240 Langridge Street, Abbotsford, Victoria 3067.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

DENTAL EQUIPMENT—TOOTHBRUSHES

1 SCOPE. This standard specifies requirements for manually operated toothbrushing devices for general use. It does not apply to special purpose treatment brushes or denture brushes or to those toothbrushes which are power operated.

NOTE: For specific directives regarding the use of this standard by the Department of Defence, see Appendix A.

2 DESCRIPTION OF TOOTHBRUSH. The components of the toothbrush are the brush, the tuft, the handle, the stock and the head.

3 DEFINITIONS. For the purpose of this standard, the following definitions apply:

3.1 Brush—that part of the toothbrush that comprises the tufts.

3.2 Tuft—the aggregate of monofilaments that are fixed in one hole in the stock.

3.3 Stock—the extension of the handle which supports the tufts.

3.4 Handle—that part of the toothbrush which is not defined as the head.

3.5 Head—the stock and brush.

3.6 Monofilaments—single strands of material which are grouped together to form the tuft.

3.7 Contour variation (for serrated tufts and contoured brushes only).

3.7.1 For tufts—the difference in length between the longest and shortest monofilaments in a single tuft.

3.7.2 For brushes—the difference in height between the highest and lowest tufts.

3.8 Tuft configuration—number of rows of tufts and placement of tufts on the brush head.

4 CLASSIFICATION.

4.1 Basis of classification. Toothbrushes shall be classified by handle size and texture of the tufts in accordance with Clauses 4.2 and 4.3.

4.2 By handle size.

- (a) Adult.
- (b) Junior.
- (c) Child.

4.3 By texture of tufts.

- (a) Hard.
- (b) Medium.
- (c) Soft.
- (d) Extra soft.

5 MATERIALS.

5.1 Handle and stock. The handle and stock shall be manufactured from materials which are free of objectionable odour or taste, and shall be non-injurious and non-toxic. Any colouring material added shall be fast. The handle shall be made of sufficiently strong and resilient material and moulded in such a manner that it will not break under normal use. The handle style may be varied according to individual manufacturers' designs, provided that it still complies with the requirements of Clauses 6, 7.1 and 7.2.

5.2 Brush. The brush material shall consist of non-toxic synthetic monofilaments of dimensions specified in Table 1. The mono filaments shall be of—

TABLE 1
TOOTHBRUSHES—GENERAL SPECIFICATIONS*

millimetres

Texture of tufts	Specification	Details		
		Adult	Junior	Child
Hard	(a) Brush length	18—31		
	(b) Brush width	7—12		
	(c) Diameter of monofilaments†	0.29—0.32		
	(d) Length of tufts	11—13		
Medium	(a) Brush length	18—31		
	(b) Brush width	7—12		
	(c) Diameter of monofilaments†	0.24—0.29		
	(d) Length of tufts	11—13		
Soft	(a) Brush length	18—31	17—29	15—25
	(b) Brush width	7—12	7—11	5—7.5
	(c) Diameter of monofilaments†	0.19—0.24	0.19—0.24	0.19—0.24
	(d) Length of tufts	9—13	9—13	9—12
Extra soft	(a) Brush length	18—31	17—29	15—25
	(b) Brush width	7—12	7—11	5—7.5
	(c) Diameter of monofilaments†	0.16—0.19	0.16—0.19	0.16—0.19
	(d) Length of tufts	9—13	9—13	9—12
All textures	Tuft and brush contour variations	2 max.	1.5 max.	1.0 max.

* For number of tufts, see Clause 8.2.

† Can be measured using a micrometer, dial gauge or projection toolmaker's microscope.