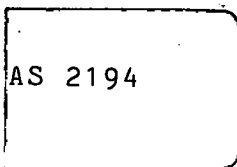


TAS JUNE 1988

Australian Standard 2194-1978

DENTAL POLYCARBOXYLATE MATERIALS

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 2194).



[Title allocated by Defence Cataloguing Authority:
CEMENT, POLYCARBOXYLATE, DENTAL]



STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

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THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

- Australian Dental Association
- Australian Dental Schools and Hospitals
- Australian Dental Standards Laboratory
- Australian Dental Trade Association
- Victorian Employers Federation

This standard, prepared by Committee DN/4, Dental Cements, was approved on behalf of the Council of the Standards Association of Australia on 27 June 1978, and was published on 1 August 1978.

To keep abreast of progress in industry, Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

PREFACE

This standard was prepared under the authority of the Dental Materials and Equipment Standards Committee. It is one of a series intended for use in assessing the quality of dental products used in Australia.

In this standard, 'initial set time' is the time from the start of mixing to the initial change in viscosity. 'Final set time' is the time from the start of mixing to the time after the rapid increase in viscosity during setting has occurred and a steady state is first achieved.

Attention is drawn to the fact that facilities for testing materials for compliance with this standard are provided by the Australian Dental Standards Laboratory, 240 Langridge Street, Abbotsford, Victoria 3067.

This standard makes reference to the following standard:

AS 2193 Methods for the Calibration and Grading of Force-measuring Systems of Testing Machines

This standard was issued in draft form for public review as DR 76113.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard Specification for DENTAL POLYCARBOXYLATE MATERIALS

1 SCOPE. This specification applies to dental carboxylate cements, sometimes known as dental polycarboxylate cements, the principal constituents of which are zinc oxide and polyacrylic acid or similar polycarboxylic acids.

2 CLASSIFICATION. The material shall be of the following types:

Type I—Cement material.

Type II—Base forming and temporary filling material.

3 STORAGE OF TEST SAMPLE. The test sample shall be stored in the original containers or in clean, dry, glass containers, stoppered in such a manner that they are airtight.

4 MATERIAL. The components shall be free from foreign materials and be uniform throughout. Liquids shall be free from deposits and sediments.

5 TEST CONDITIONS. All tests shall be conducted at the following ambient conditions:

Temperature $23 \pm 1^\circ\text{C}$

Relative humidity 50 ± 5 percent.

6 PREPARATION OF MATERIAL FOR TESTING. All tests shall be conducted on material proportioned and mixed according to the manufacturer's instructions.

7 COLOUR. The colour of the set material shall match the manufacturer's shade guide or correspond to the manufacturer's description.

8 MIXING PROPERTIES. The components, when mixed according to the manufacturer's instructions, shall harden or set to a condition satisfactory for dental use. The mixed material shall be of a uniformly smooth consistency and shall not form lumps, evolve gas or discolour tooth structure.

9 INITIAL SET TIME. When determined in accordance with Appendix A, the initial set time of the material shall meet the requirements of Table 1.

10 FINAL SET TIME. When determined in accordance with Appendix B, the final set time of the material shall meet the requirements of Table 1.