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Australian Standard<sup>™</sup>

**Biological evaluation of medical devices** 

Part 17: Establishment of allowable limits for leachable substances



This Australian Standard was prepared by Committee HE-012, Surgical Implants. It was approved on behalf of the Council of Standards Australia on 8 July 2004. This Standard was published on 15 September 2004.

The following are represented on Committee HE-012:

Australian College of Operating Room Nurses Australian Dental Association Australian Industry Group Australian Orthopaedic Association Commonwealth Department of Health and Ageing Department of Defence (Australia) Medical Industry Association of Australia Inc Neurosurgical Society of Australasia Royal Australasian College of Surgeons Royal Perth Hospital The Australian Society for Biomaterials University of New South Wales University of Sydney

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AS ISO 10993.17-2004

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#### PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee HE-012, Surgical Implants. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

This Standard is identical with and has been reproduced from ISO 10993-17:2002, *Biological evaluation of medical devices*, Part 17: *Establishment of allowable limits for leachable substances*.

The objective of this Standard is to specify a method for the determination of allowable limits for substances leachable from medical devices. It describes a systematic process through which identified risks arising from toxicologically hazardous substances present in medical devices can be quantified.

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An informative annex is only for information and guidance.

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- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
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AS ISO 10993, Biological evaluation of medical devices, consists of the following parts:

- Part 1: Evaluation and testing
- Part 3: Tests for genotoxicity, carcinogenicity and reproductive toxicity
- Part 4: Selection of tests for interactions with blood
- Part 5: Tests for in vitro cytotoxicity
- Part 6: Tests for local effects after implantation
- Part 7: Ethylene oxide sterilization residuals
- Part 8: Selection and qualification of reference materials for biological tests
- Part 9: Framework for identification and quantification of potential degradation products
- Part 10: Tests for irritation and delayed-type hypersensitivity
- Part 11: Tests for systematic toxicity
- Part 12: Sample preparation and reference materials
- Part 13: Identification and quantification of degradation products from polymeric medical devices
- Part 14: Identification and quantification of degradation products from ceramics
- Part 15: Identification and quantification of degradation products from metals and alloys
- Part 16: Toxicokinetic study design for degradation products and leachables
- Part 17: Establishment of allowable limits for leachable substances (this Standard)

References to International Standards and European Standards should be replaced by references to Australian or Australian/New Zealand Standards as follows:

ISO		AS ISO	
10993	Biological evaluation of medical devices	10993	Biological evaluation of medical devices
10993-1	Part 1: Evaluation and testing	10993.1	Part 1: Evaluation and testing

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