

AS 2243.4—1998

Australian Standard™

Safety in laboratories

Part 4: Ionizing radiations

This Australian Standard was prepared by Committee, CH/26—Safety in Laboratories. It was approved on behalf of the Council of Standards Australia on 1 May 1998 and published on 5 July 1998.

The following interests are represented on Committee CH/26:

Agriculture Victoria
Australian Council of Trade Unions
CSIRO Manufacturing Science and Technology
Department of Defence, Australia
Department of Labour, New Zealand
Environmental Science and Research, New Zealand
ESR Kenepuru Science Centre, New Zealand
Ministry of Commerce, New Zealand
National Association of Testing Authorities, Australia
New Zealand Chemical Industry Council
New Zealand Microbiological Society
Victorian WorkCover Authority
WorkCover New South Wales

This Standard was prepared by the following participants:

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Independent consultant health physicists
University of New South Wales
University of Western Australia

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PREFACE

This Standard was prepared by Subcommittee CH/26/4, Ionizing Radiation, on behalf of the Joint Standards Australia/Standards New Zealand Committee CH/26, Safety in Laboratories, to supersede AS 2243.4(Int)—1994.

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this Standard is to promote safe working practices and to prevent unnecessary exposure of persons working in laboratories containing sources of ionizing radiation.

This Standard was prepared after consideration of the *Recommendations for limiting exposure to ionizing radiation* (1995) [NOHSC:3022] and *National standard for limiting occupational exposure to ionizing radiation* [NOHSC:1013 (1995)] (Radiation Health Series No. 39) issued by the National Health and Medical Research Council (NHMRC) and Worksafe Australia, and the most recent recommendations of the International Commission on Radiological Protection (ICRP). Where necessary, future relevant publications of the NHMRC and ICRP should be consulted as they become available.

The sections of this Standard dealing with dose limits, accident and emergency procedures and the requirements for radiological laboratories have been further refined since the superseded interim edition. Where there is a choice of data, the most restrictive data is presented. For more detailed information, the referenced source documents should be consulted. The previous edition contained some design information for laboratories which has been omitted from this Standard and may now be found in AS/NZS 2982.1, *Laboratory design and construction*, Part 1: *General requirements*.

This Standard is Part 4 in a series aimed at promoting safety in laboratories. The series is as follows:

- Part 1: General
- Part 2: Chemical aspects
- Part 3: Microbiology
- Part 4: Ionizing radiations (this Standard)
- Part 5: Non-ionizing radiations
- Part 6: Mechanical aspects
- Part 7: Electrical aspects
- Part 8: Fume cupboards
- Part 9: Recirculating fume cabinets
- Part 10: Storage of chemicals

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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