

Australian/New Zealand Standard™

Safety in laboratories

Part 6: Plant and equipment aspects



AS/NZS 2243.6:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CH-026, Safety in Laboratories. It was approved on behalf of the Council of Standards Australia on 13 May 2010 and on behalf of the Council of Standards New Zealand on 28 May 2010.
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The following are represented on Committee CH-026:

Australian Industry Group
Australian Institute of Occupational Hygienists
CSIRO
Department of Labour, New Zealand
Department of Primary Industries, Vic.
Environmental Science and Research, New Zealand
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee, CH-026, Safety in Laboratories, to supersede AS 2243.6—1990, *Safety in laboratories, Part 6: Mechanical aspects*.

The revision was undertaken to update the Standard to reflect risk management principles and current occupational health and safety approaches and terminology. A new section has been added to include information on planning for use of plant and equipment covering risk assessments, procurement, installation and commissioning of plant and equipment, along with training of persons who will use it. A section on maintenance has also been added.

This Standard is intended for use in conjunction with other Standards of the AS/NZS 2243 series and is applicable to all laboratory situations. Other parts of the series are as follows:

- Part 1: Planning and operational aspects
- Part 2: Chemical aspects
- Part 3: Microbiological aspects and containment facilities
- Part 4: Ionizing radiations
- Part 5: Non-ionizing radiations—Electromagnetic, sound and ultrasound
- Part 7: Electrical aspects
- Part 8: Fume cupboards
- Part 9: Recirculating fume cabinets
- Part 10: Storage of chemicals.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements and recommendations designed to promote safe working practice relevant to the operation of plant and equipment in laboratories and describes the nature of the potential hazards. This Standard also covers safe working practices relevant to the use of compressed gas cylinders and cryogenic substances.

1.2 OBJECTIVE

The objective of this Standard is to specify requirements and provide information, recommendations and procedures on the conduct of operations involving plant and equipment in laboratories that will promote safe working practices.

1.3 APPLICATION

This Standard should be used in conjunction with the appropriate part(s) of AS/NZS 2243 that are relevant to the type of work being carried out in the laboratory. If the requirements of any part of this Standard conflict with any National, State or Territory regulations, the appropriate statutory regulations shall apply.

1.4 REFERENCED DOCUMENTS

A list of documents referenced in this Standard is given in Appendix A.

1.5 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.5.1 Competent person

A person who has acquired through training, qualifications or experience, or a combination of these, the knowledge and skills enabling that person to perform a specified task.

1.5.2 Hazard

A source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these. [AS/NZS 4801]

1.5.3 Laboratory

Any building or part of a building used, or intended to be used, for scientific or technical work, including research, quality control, testing, teaching or analysis. Such work may involve the use of chemicals (including dangerous goods and hazardous substances), pathogens and radiation, or processes including electrical or mechanical work. The laboratory includes such support areas as instrument and preparation areas, laboratory stores and any offices attached or adjacent to the laboratory.