

Australian/New Zealand Standard™

Classification of hazardous areas

Part 3.6: Examples of area classification—Laboratories, including fume cupboards and flammable medical agents



AS/NZS 2430.3.6:2004

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee MS-011, Classification of Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 31 March 2004 and on behalf of the Council of Standards New Zealand on 30 April 2004. This Standard was published on 20 May 2004.

The following are represented on Committee MS-011:

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS/11, Classification of Hazardous Areas, to supersede AS/NZS 2430.3.6:1997, *Classification of hazardous areas, Part 3.6: Examples of area classification—Laboratories including fume cupboards and flammable medical agents*.

This Standard incorporates Amendment No. 1 (March 2007). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

Changes to the 1997 edition include—

- (a) a complete rewording of Clause 5, *Fume cupboard and laboratories*, including new Figures;
- (b) deletion of Appendix A;
- (c) inclusion of a direct reference to fume cupboards complying or not with AS/NZS 2243.8;
- (d) correction of typographical errors;
- (e) alteration of the symbols for hazardous areas zones (to align with AS/NZS 60079.10); and
- (f) update of referenced documents.

The objective of the AS/NZS 2430.3 series of Standards is to provide guidance to the industries and statutory authorities concerned with the classification of hazardous areas.

This series of Standards details examples of area classification of commonly occurring situations, based on the principles of AS/NZS 60079.10, *Electrical apparatus for explosive gas atmospheres, Part 10: Classification of hazardous areas*.

The AS/NZS 2430.3 series is as follows:

AS/NZS	
2430.3	Classification of hazardous areas—Examples of area classification
2430.3.1	Part 3.1: General
2430.3.2	Part 3.2: Vehicle workshops, vehicle parking, fuel dispensing stations and aircraft hangars
2430.3.3	Part 3.3: Flammable liquids
2430.3.4	Part 3.4: Flammable gases
2430.3.5	Part 3.5: Refineries and major processing plants
2430.3.6	Part 3.6: Laboratories including fume cupboards and flammable medical agents (this Part)
2430.3.7	Part 3.7: Landfill gas, sewage treatment and sewage pumping plants
2430.3.8	Part 3.8: Surface coatings and adhesives
2430.3.9	Part 3.9: Miscellaneous

The AS 2430 series of Standards for classification of hazardous areas used to be formed by AS 2430.1, AS 2430.2 and AS 2430.3.

AS 2430.2 was replaced by AS/NZS 61241.3 in 1999 and AS 2430.1 was replaced by AS/NZS 60079.10 in 2004.

In 1997, AS 2430.3 was split into a Series of nine Parts – 3.1 to 3.9; these initial nine Parts have been superseded by this 2004 edition.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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1 SCOPE

This Standard provides examples of area classification for areas associated with laboratories and fume cupboards and the use of flammable medical agents. It is part of the AS/NZS 2430.3 series, which recommends the classification of several commonly occurring situations and should be read in conjunction with AS/NZS 2430.3.1.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS	
2243	Safety in laboratories
2243.8	Part 8: Fume cupboards
2381	Electrical equipment for explosive atmospheres—Selection, installation and maintenance
2381.1	Part 1: General requirements
2430.3	Classification of hazardous areas—Examples of area classification
2430.3.1	Part 3.1: General
60079	Electrical apparatus for explosive gas atmospheres
60079.10	Part 10: Classification of hazardous areas

3 DEFINITIONS

For the purposes of this Standard the definitions in AS/NZS 60079.10 and AS/NZS 2430.3.1 apply.

4 FLAMMABLE MEDICAL AGENTS

4.1 Scope

This Clause includes areas in which flammable medical agents are stored and used.

NOTE: Flammable medical agents include anaesthetics in the form of gases or vapours such as cyclopropane, divinyl ether, chloroethane, diethyl ether and ethylene.

Anaesthetizing areas include areas in hospitals and the like in which flammable anaesthetics are or may be administered to patients. Such locations include operating rooms, delivery rooms and anaesthesia rooms and any corridors, utility rooms or other areas which are or may be used for administering flammable anaesthetics to patients. Recovery rooms are not classed as anaesthetizing locations unless used for the administering of flammable anaesthetics.

4.2 Classification of hazardous areas

4.2.1 Storage of flammable medical agents

Entire room or space**Zone 1**