

Australian/New Zealand Standard™

## **Classification of hazardous areas**

### **Part 3.5: Examples of area classification—Refineries and major processing plants**

#### **AS/NZS 2430.3.5:2004**

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. It was published on 20 May 2004.

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# Australian/New Zealand Standard™

## Classification of hazardous areas

### Part 3.5: Examples of area classification—Refineries and major processing plants

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS-011, Classification of Hazardous Areas, to supersede AS/NZS 2430.3.5:1997, *Classification of hazardous areas, Part 3.5: Examples of area classification—Refineries and major processing plants*.

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.

Changes to the 1997 editions include—

- (a) correction of typographical errors;
- (b) alteration of the symbols for hazardous areas zones (to align with AS/NZS 60079.10); and
- (c) update of referenced documents.

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 (this Part)
- 2430.3.6 Part 3.6: Laboratories including fume cupboards and flammable medical agents
- 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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**Australian/New Zealand Standard**  
**Classification of hazardous areas**

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**Part 3.5: Examples of area classification—Refineries and major processing plants**

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**1 SCOPE**

This Standard provides examples of area classification for areas associated with the production, processing, handling and storage of flammable liquids and gases in refineries and major processing plants. 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.

The examples shown in this Standard use a Generalized Method of area classification.

For examples of area classification for flammable liquids and gases based on the Source of Release Method reference should be made to AS/NZS 2430.3.3 and AS/NZS 2430.3.4.

NOTE: The classifications given in this Standard are based on the assumption that the installations are carried out in accordance with the relevant requirements of the authority having jurisdiction (refer to Scope of AS/NZS 2430.3.1).

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

**AS**

- 2380 Electrical equipment for explosive atmospheres—Explosion-protection techniques  
2380.4 Part 4: Pressurized rooms or pressurized enclosures

**AS/NZS**

- 2430 Classification of hazardous areas—Examples of area classification  
2430.3.1 Part 3.1: General  
2430.3.3 Part 3.3: Flammable liquids  
2430.3.4 Part 3.4: Flammable gases

- 60079 Electrical apparatus for explosive gas atmospheres  
60079.10 Part 10: Classification of hazardous areas

**BS**

- 5908 Code of practice for fire precautions in the chemical and allied industries

**3 DEFINITIONS**

For the purposes of this Standard, the definitions in AS/NZS 60079.10 and AS/NZS 2430.3.1 apply. Adequately and inadequately ventilated areas/locations are detailed in AS/NZS 2430.3.1, Appendix B.