

Australian Standard 1216.1—1984

**CLASSIFICATION, HAZARD IDENTIFICATION
AND INFORMATION SYSTEMS FOR
DANGEROUS GOODS**

Part 1—CLASSIFICATION AND CLASS LABELS FOR DANGEROUS GOODS

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DANGEROUS GOODS]



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AUSTRALIAN STANDARD

**CLASSIFICATION,
HAZARD IDENTIFICATION
AND INFORMATION SYSTEMS FOR
DANGEROUS GOODS**

**Part 1
CLASSIFICATION AND CLASS
LABELS FOR DANGEROUS
GOODS**

AS 1216.1—1984

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PREFACE

This edition of this standard was prepared by the Association's Committee on Safe Handling of Chemicals, under the direction of the Chemical Standards Board, to supersede AS 1216, Part 1—1981. The standard is the first part of a series specifying a system for the classification of dangerous goods and explaining the various hazard identification and emergency information systems and their associated marking symbols, which are designed to facilitate the safe handling, transport and storage of dangerous goods.

This standard deals with the classification of dangerous goods and the design and use of appropriate class labels for them. This system is completely compatible with the Australian Transport Advisory Council's Australian Code for the Transport of Dangerous Goods by Road and Rail. Both systems are based on the Dangerous Goods Code of the International Maritime Organization which stems, in turn, from the system adopted by the United Nations.

The present edition accordingly classifies explosives (Class 1) into divisions instead of classes, and flammable liquids (Class 3) are described in greater detail as the methods for determining flashpoint are now specified. Changes have also been made to the labels required for radioactive (Class 7) substances as the details of these labels have been revised by the International Atomic Energy Agency, which can be clearly seen by comparison with the previous labels.

Other parts of the standard deal with the UN system of numbering, the 'HAZCHEM' emergency action code and the hazard identification system of the USA National Fire Protection Association. The information provided by these different systems is used, as required, in conjunction with the Association's integrated series of standards dealing with dangerous goods and notably in AS 1678, Emergency Procedure Guides—Transport, AS 2508, Safe Storage and Handling Information Cards for Hazardous Materials, and the series dealing with the storage and handling of various hazardous chemical materials, e.g. AS 2507, The Storage and Handling of Pesticides.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

CLASSIFICATION, HAZARD IDENTIFICATION AND INFORMATION SYSTEMS
FOR DANGEROUS GOODS

PART 1—CLASSIFICATION AND CLASS LABELS FOR DANGEROUS GOODS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard sets out a system of classification for dangerous goods, and a series of warning labels corresponding to the designated classes and subdivisions (see Table 2.1 and Fig. 2.1).

1.2 PURPOSE. The purpose of the standard is to facilitate the identification of dangerous goods and the hazards associated with their transport, handling and storage, so as to reduce the risk to life, health and property, arising from the hazardous properties of the goods.

1.3 REFERENCED DOCUMENTS. The following documents are referred to in this standard:

AS 1319	Rules for the Design and Use of Safety Signs for the Occupational Environment
AS 1940	SAA Flammable and Combustible Liquids Code
AS 2106	Determination of the Flashpoint of Flammable Liquids (Closed Cup)
BS 381C	Colours for Identification, Coding and Special Purposes
IP 36*	Flash and Fire Points by Cleveland Open Cup

Australian Code for the Transport of Dangerous Goods by Road and Rail ('ATAC Code') prepared by the standing national Advisory Committee on the Transport of Dangerous Goods. Published by the Australian Government Publishing Service.

Code of Practice for the Safe Transport of Radioactive Substances (1982). Published by the Australian Government Publishing Service.

1.4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.4.1 Corrosive—having the quality of eating away, damaging or destroying materials or living tissue by direct chemical action.

1.4.2 Dangerous goods—substances which are classifiable under the classification system as specified in Section 2 of this standard. Dangerous goods also include empty receptacles or packages which have contained dangerous goods, unless such receptacles or packages have been decontaminated.

1.4.3 Explosive—a substance, whether or not contained in a device specially prepared, which is manufactured with a view to producing a practical effect by

explosion or a pyrotechnic effect, or any other substance which, by reason of the nature of its explosive properties is to be treated as such, provided that—

- (a) an explosive atmosphere of gas, vapour or dust shall not be considered to be an explosive for the purposes of this definition; and
- (b) substances otherwise classified shall not be deemed to be explosives within the meaning of this definition.

1.4.4 Flammable—capable of being ignited and of burning in air.

NOTE: The word 'flammable' has now replaced the previously used word 'inflammable'.

1.4.5 Flashpoint—the lowest temperature at which application of a small flame causes the vapour above a flammable liquid to produce a momentary flash when it is heated under standardized conditions of test laid down by an appropriate test method, as in AS 2106.

1.4.6 Hazard—a physical situation with a potential for harm to life, health or property.

1.4.7 Infectious—having the ability to communicate disease by direct infection through organisms.

1.4.8 Poison—a substance that, when introduced in sufficient quantity into an animal organism by ingestion, inhalation or absorption, destroys or threatens to destroy life or injures health.

NOTE: The word 'toxic' has the same meaning as the word 'poisonous'.

1.4.9 Radioactive substance—a substance which spontaneously emits ionizing radiations of which the specific activity is greater than the value specified in Clause 2.3.7.

1.4.10 Risk—

- (a) the probability that a hazard may be realized at a specific level in a given span of time; or
- (b) the probability that an individual may suffer a specified level of injury as a result of a hazard, in a given span of time.

1.4.11 Spontaneously combustible—liable to burst into flame and burn, under the conditions encountered, without the external application of heat.

*Institute of Petroleum.