

Australian Standard®

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**Classification, hazard identification  
and information systems for  
dangerous goods**

**Part 2: HAZCHEM emergency  
action code**

**Part 3: NFPA hazard identification  
system**

**Part 4: UN substance identification  
numbers**

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[Title allocated by Defence Cataloguing Authority:  
CLASSIFICATION, HAZARD IDENTIFICATION AND INFORMATION  
SYSTEMS FOR DANGEROUS GOODS  
AS 1216, PART 2—HAZCHEM EMERGENCY ACTION CODE  
AS 1216, PART 3—NFPA HAZARD IDENTIFICATION SYSTEM  
AS 1216, PART 4—UN SUBSTANCE IDENTIFICATION NUMBERS]

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Agricultural and Veterinary Chemicals Association of Australia  
Australian Chamber of Commerce  
Australian Chemical Industry Council  
Australian Council of Trade Unions  
Australian Institute of Petroleum Limited  
Australian Medical Association  
Australian Road Transport Federation  
Board of Fire Commissioners of New South Wales  
Commonwealth Institute of Health  
Confederation of Australian Industry  
Country Fire Authority  
Department of Defence  
Department of Industry and Commerce  
Department of Science and Technology  
Department of Industrial Relations, N.S.W.  
Department of Minerals and Energy, Vic.  
Health Commission of New South Wales  
Insurance Council of Australia  
Metropolitan Fire Brigades Board, Melbourne  
National Health and Medical Research Council  
Public Health Department, W.A.  
Railways of Australia Committee

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This standard, prepared by Committee CH/9, Safe Handling of Chemicals, was approved on behalf of the Council of the Standards Association of Australia on 4 May 1981, and was published on 1st July 1981.

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AUSTRALIAN STANDARD

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

**Part 2  
HAZCHEM EMERGENCY  
ACTION CODE**

**AS 1216, Part 2—1981**

**Part 3  
NFPA HAZARD  
IDENTIFICATION SYSTEM**

**AS 1216, Part 3—1981**

**Part 4  
UN SUBSTANCE  
IDENTIFICATION NUMBERS**

**AS 1216, Part 4—1981**

First published .....1981

PUBLISHED BY STANDARDS AUSTRALIA  
(STANDARDS ASSOCIATION OF AUSTRALIA)  
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 2290 9

## PREFACE

This standard was prepared by the Association's Committee on Safe Handling of Chemicals, under the direction of the Chemical Standards Board. It includes the second, third and fourth parts of a series explaining the classification of dangerous goods and the various hazard identification and emergency information systems, and their associated marking symbols, designed to facilitate the safe handling, transport and storage of dangerous goods.

Part 2 deals with the HAZCHEM emergency action code which was originally developed in the United Kingdom and is now widely used in Australia, particularly as a component of the information placarding on transport vehicles. It has been adopted in the Australian Transport Advisory Council's Australian Code for the Transport of Dangerous Goods by Road and Rail.

Part 3 deals with the hazard identification system developed by the National Fire Protection Association (NFPA) of the U.S.A. The NFPA hazard identification symbols have been incorporated into the program of work of the SAA committee, for completeness of information. They are included in AS . . . ., Safe Storage and Handling Information Cards\*, which identify the hazards of dangerous goods.

Part 4 briefly introduces the United Nations system of assigning a separate number to all substances classified as 'dangerous goods' so that they can be identified by a reference to that particular number. This facilitates the assembly of physical and chemical data and of emergency information associated with that substance and is therefore an integral part of the system of standards dealing with dangerous goods.

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\*In course of preparation.

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STANDARDS ASSOCIATION OF AUSTRALIA

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**Australian Standard**

**for**

**CLASSIFICATION, HAZARD IDENTIFICATION AND INFORMATION**

**SYSTEMS FOR DANGEROUS GOODS**

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Part 2

HAZCHEM EMERGENCY ACTION CODE

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FOREWORD

The HAZCHEM codes used in the Australian Code for the Transport of Dangerous Goods by Road and Rail issued by the Australian Transport Advisory Council (ATAC) are based on those adopted in the United Kingdom. These are assigned by the U.K. Home Office Joint Committee on Fire Brigade Operations and confirmed by the U.K. Health and Safety Executive. The system is covered by Crown copyright, for which permission to reprint has been obtained.

Coding adopted for specific substances is listed in the ATAC Code. The responsible authority in Australia for using HAZCHEM codes on dangerous substances is the Advisory Committee for the Transport of Dangerous Goods of the ATAC. This body bases its codings on those issued by the U.K. Home Office.

The purpose of this standard is to facilitate the understanding and use of the HAZCHEM code system by emergency services which provide assistance at the location of an emergency involving dangerous goods. The HAZCHEM emergency action information code is required to be used by the Australian Code for the Transport of Dangerous Goods by Road and Rail. It is equally useful in connection with the storage and handling of dangerous goods and is referred to in the appropriate Australian standards.

The underlying purpose is to reduce the risk to life, health, property and the environment arising from the hazardous properties of dangerous goods.

## SECTION 1. SCOPE AND DEFINITIONS

**1.1 SCOPE.** This standard explains the HAZCHEM system which is commonly used for conveying information to emergency services in connection with the transport and handling of dangerous goods. The system provides for correct immediate response action in the event of fire or spillage so as to minimize the hazards to people and the local environment. It is therefore recommended as the primary reference for the emergency services.

NOTE: It should be stressed that this simple coding system, comprising a numeral followed by one or more letters, provides only for initial emergency actions and is intended to be augmented by the seeking of additional, specialized advice.

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

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

**1.2.2 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.