

Australian Standard<sup>®</sup>

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**SAA PACKAGING CODE**

**Part 21—PACKAGING OF  
DANGEROUS GOODS**

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This Australian standard was prepared by Committee PK/25, Packaging Code. It was approved on behalf of the Council of the Standards Association of Australia on 15 August 1986 and published on 6 October 1986.

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The following interests are represented on Committee PK/25:

- Adhesives and Sealants Manufacturers Association
- Agricultural and Veterinary Chemicals Association of Australia
- Airline Company
- Australian and New Zealand Pulp and Paper Industry Technical Association (Appita)
- Australian Institute of Packaging
- Australian Paint Manufacturers Federation
- Australian Timber Products Council
- Bureau of Steel Manufacturers of Australia
- Canmakers Institute of Australia
- Confederation of Australian Industry
- Cordage Institute of Australia
- Department of Defence
- Department of Industry Technology and Commerce
- Department of Primary Industry
- Department of Transport
- Glass Packaging Institute of Australia
- Packaging Council of Australia
- Plastics Institute of Australia Incorporated
- Printing and Allied Trades Employers Federation of Australia
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## PREFACE

This standard was prepared by the Association's Packaging Code Committee under the direction of the Packaging Standards Board. It provides a list of Australian Regulatory Authorities whose advice should be sought when packing dangerous goods.

This standard has been divided into different parts dealing with specific subjects, as follows:

<i>Part</i>	<i>Title</i>
1	Glossary of Packaging Terms*
2	Basic Principles of Packaging Practice*
3	Mechanical Aids in Package Handling*
4	Protection against Spoilage of Packages and their Contents by Microorganisms, Insects, Mites and Rodents*
5	Metal Protection
6	Paper and Board, Wrappers and Containers*
7	Timber Containers
8	Textile Bags, Sacks and Wrappings
9	Metal Containers
	9.1 Metal Cans and Tubes*
10	Cushioning Materials
11	Cordage
12	Adhesive Closing and Sealing Tapes
13	Tensional Strapping*
14	Adhesives for Packaging*
15	Glass Containers*
16	Flexible Packaging*
17	Packaging in Plastics Containers*
18	Use of Desiccants in Packaging*
19	Packaging for Airfreight*
20	Handling of Goods in Freight Containers*
21	Packaging of Dangerous Goods
22	Closures*
23	Shrink and Stretch Wrapping*

\* Published.

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## STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard  
SAA PACKAGING CODE

## PART 21—PACKAGING OF DANGEROUS GOODS

**1 SCOPE.** This standard provides guidance for the selection of packaging for dangerous goods, to meet legislative requirements. The relevant transport codes and Regulatory Authorities are also identified.

**2 APPLICATION.** This standard applies to the packaging of substances or articles which are classified, prescribed or declared to be dangerous goods or hazardous substances.

Packaging is one of a number of aspects of distribution of dangerous goods which are regulated in Australia by either State or Commonwealth legislation, depending on the required mode of transport. In each case, this legislation is either based on or calls up by reference a published national or international code pertinent to that mode of transport. The packaging requirements of all of these codes are similar as each is based on the published recommendations prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods, but modified to suit the conditions pertaining to the mode of transport covered. It is therefore essential to consult the correct Code when packaging dangerous goods for transport.

A list of Regulatory Authorities is given in Appendix A.

A list of Australian Standards which may be of help is given in the Annex.

**3 DEFINITIONS.** For the purposes of this standard, the definitions given in AS 2400, Part 1, Glossary of Packaging Terms, apply. Other technical terms used should take the meaning assigned to them by the appropriate dangerous goods transport code.

#### 4 TRANSPORT CODES APPLICABLE TO DANGEROUS GOODS.

**4.1 Air transport.** 'Technical Instructions for the Safe Transport of Dangerous Goods by Air'—published by the International Civil Aviation Organization. This code is usually referred to as the 'ICAO Rules'.

Technically equivalent to the ICAO Rules are the 'Dangerous Goods Regulations' published by the International Air Transport Association (IATA Regulation—these are more readily available in Australia).

**4.2 Sea transport.** 'International Maritime Dangerous Goods Code' (IMDG Code)—published by the International Maritime Organization, including the Australian Supplement 'Marine Orders, Part 41 (Cargo and Cargo Handling—Dangerous Goods)'.

**4.3 Road and rail transport.** 'The Australian Code for the Transport of Dangerous Goods by Road and Rail'. (ADG Code)—a periodic publication of the Commonwealth of Australia Gazette, published by the Australian Government Publishing Service.

This code either forms the basis of or is called up by direct reference in the dangerous goods transport legislation in all States and Territories of Australia. Whilst compliance with the specific legislation is mandatory, dangerous goods packaged fully in accordance with the ADG Code will meet the packaging requirements of this legislation in all states.

#### 5 PACKAGING FOR DANGEROUS GOODS.

**5.1 General.** Packaging requirements are given in each of the transport codes. The following, however, indicates the common principles which apply to the selection of a packaging\* for dangerous goods.

**5.2 Product classification.** Dangerous goods shall be classified according to their hazardous properties before suitable packaging can be selected. As there are minor differences in classifications between the codes, the code applicable to the chosen primary mode of transport should be referenced. Classification can usually be determined by reference to the name of the substance or article in the index or list of dangerous goods in the code. If not specifically listed, the dangerous goods shall be classified by reference to the classification principles given in each code (e.g. Section 2 of ADG code). The packaging group, if applicable, of the substance or article indicating its degree of hazard shall also be determined.

**5.3 Physical properties.** Before packagings can be specified for dangerous goods, the physical properties of those goods shall be known. As a minimum it is necessary to determine the physical state, packing density and for gaseous, liquid and other products capable of generating pressures in an enclosed space under transport conditions, the vapour or gas pressures generated at temperatures specified by the relevant code.

**5.4 Packaging methods.**† The codes detail permitted packaging methods for dangerous goods. Methods may be specific to particular dangerous goods or permitted for a group of dangerous goods having similar hazards and physical properties. Methods not specified may only be used with specific, usually written, approval from the relevant Regulatory Authority.

\* The term used in the transport codes is as follows:

Packaging— means:

- a) in relation to dangerous goods of Class 2, a container having a capacity not exceeding 500 litres;
- b) in relation to dangerous goods of other than Class 2 which are liquid, a container having a capacity not exceeding 250 litres; and
- c) in relation to solid dangerous goods, a container holding or capable of holding not more than 400 kilograms of those goods in an undivided quantity.

Packaging includes any other components or materials necessary for a container to perform its containment function.

† Packaging methods— the term 'Packaging Methods' used in the codes is explained in AS 2400, Part 1 as 'Systems, packaging'.