

Australian Standard[®]

**Packaging for poisonous
substances**

This Australian Standard was prepared by Committee PK/24, Containers for Poisonous Substances. It was approved on behalf of the Council of Standards Australia on 28 March 1997 and published on 5 June 1997.

The following interests are represented on Committee PK/24:

Australian Institute of Petroleum
Canmakers Institute of Australia
Commonwealth Department of Human Services and Health
Health and Community Services, Victoria
N.S.W. Health Department
Packaging Council of Australia
Pharmacy Board of New South Wales
Pharmacy Board of Victoria
Plastics and Chemicals Industry Association
Queensland Health
South Australian Health Commission
The National Council of Chemical and Pharmaceutical Industries

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 94178.

Australian Standard[®]

**Packaging for poisonous
substances**

Originated as AS Z21—1963.
Previous edition AS 2216—1978.
Second edition 1997.

Incorporating:
Amdt 1—1997

PREFACE

This Standard was prepared by the Standards Australia Committee PK/24, Containers for Poisonous Substances, as a revision of AS 2216—1978, *Glass and rigid plastics containers for poisonous substances*.

In the preparation of this Standard, cognizance has been taken of the *Standard for the Uniform Scheduling of Drugs and Poisons* (SUSDP), published by the Australian Government Printing Service, Canberra.

This Standard should be read in conjunction with the *Standard for the Uniform Scheduling of Drugs and Poisons* (SUSDP) and the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (ADG Code).

The objective of this Standard is to ensure that poisonous substances are packaged in containers that will not leak, are appropriately marked and will maintain their integrity during the life of the poisonous substance.

The principal differences between this Standard and the 1978 edition are as follows:

- (a) Flexible containers, metal containers, fibreboard and paperboard containers have been included.
- (b) Specific nominal capacities are no longer specified.
- (c) Colour requirements for containers have been excluded.
- (d) Tactile identification requirements have been altered.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 REFERENCED DOCUMENTS	4
1.3 DEFINITIONS	5
1.4 GENERAL REQUIREMENTS	5
1.5 TACTILE IDENTIFICATION	6
SECTION 2 GLASS CONTAINERS	
2.1 SCOPE OF SECTION	7
2.2 ANNEALING	7
2.3 RESISTANCE TO THERMAL SHOCK	7
2.4 INTERNAL PRESSURE (HYDRAULIC) TEST	7
2.5 LEAKPROOFNESS TEST	7
SECTION 3 RIGID PLASTIC CONTAINERS	
3.1 SCOPE OF SECTION	8
3.2 RESISTANCE TO VERTICAL IMPACT	8
3.3 INTERNAL PRESSURE (HYDRAULIC) TEST (FOR LIQUIDS)	8
3.4 LEAKPROOFNESS TEST	8
SECTION 4 FLEXIBLE CONTAINERS	
4.1 SCOPE OF SECTION	9
4.2 RESISTANCE TO VERTICAL IMPACT	9
4.3 INTERNAL PRESSURE (HYDRAULIC) TEST	9
4.4 LEAKPROOFNESS TEST	9
4.5 TACTILE IDENTIFICATION	9
SECTION 5 METAL CONTAINERS	
5.1 SCOPE OF SECTION	10
5.2 GENERAL	10
5.3 LEAKPROOFNESS TEST	10
5.4 TACTILE IDENTIFICATION	10
SECTION 6 FIBREBOARD AND PAPERBOARD CONTAINERS, INCLUDING COMPOSITE CANS	
6.1 SCOPE OF SECTION	11
6.2 GENERAL	11
6.3 SIFTING	11
6.4 WATER ABSORPTION	11
6.5 TACTILE IDENTIFICATION	11
APPENDICES	
A PURCHASING GUIDELINES	12
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD	13
C DETERMINATION OF HANDLE STRENGTH	15
D DETERMINATION OF TOPPLING RESISTANCE	17

STANDARDS AUSTRALIA

Australian Standard

Packaging for poisonous substances

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out safety and performance requirements for the packaging of up to 2 L or 2 kg of poisonous substances.

NOTES:

- 1 This Standard is not intended to duplicate the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code). Where the requirements of the ADG Code apply, this Standard should be read in conjunction with the Code.
- 2 Appendix A contains recommendations and advice on information which should be provided by the purchaser at the time of enquiry or order.
- 3 Alternative methods for determining compliance with this Standard are given in Appendix B.
- 4 Poisonous substances are generally defined under State, Territory or Commonwealth legislation.

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- | | |
|--------|--|
| 1199 | Sampling procedures and tables for inspection by attributes |
| 1399 | Guide to AS 1199—Sampling procedures and tables for inspection by attributes |
| 2400 | Packaging |
| 2400.6 | Part 6: Paper and paperboard |
| 2854 | Tinplate cans for general use |

AS/NZS

- | | |
|------------|--|
| ISO 9000 | Quality management and quality assurance standards |
| ISO 9000.1 | Part 1: Guidelines for selection and use |
| ISO 9004 | Quality management and quality system elements |
| ISO 9004.1 | Part 1: Guidelines |

SAA

- | | |
|---------|--|
| HB18 | Guidelines for third-party certification and accreditation |
| HB18.28 | Guide 28—General rules for a model third-party certification scheme for products |

ASTM

- | | |
|-------|---|
| C147 | Standard test methods for internal pressure test on glass containers |
| C148 | Standard test methods for polariscopic examination of glass containers |
| C149 | Standard test methods for thermal shock resistance of glass containers |
| D2684 | Test method for permeability of thermoplastic containers to packaged reagents or proprietary products |

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)*

* Published by the Australian Government Publishing Service, Canberra