

Australian Standard™

**The storage and handling of
agricultural and veterinary
chemicals**

This Australian Standard was prepared by Committee CH/9, Safe Handling of Chemicals. It was approved on behalf of the Council of Standards Australia on 30 October 1998 and published on 5 December 1998.

The following interests are represented on Committee CH/9:

Air Conditioning and Refrigeration Wholesalers Association
Australasian Fire Authorities Council
Australasian Railway Association
Australian Chemical Specialties Manufacturers Association
Australian Conservation Foundation Inc
Australian Paint Manufacturers Federation
Australian Council of Trade Unions
Australian Institute of Petroleum
Department for Industrial Affairs, S.A.
Department of Minerals and Energy, W.A.
Environment Protection Authority of N.S.W.
Institution of Engineers, Australia
National Occupational Health and Safety Commission
New Zealand Chemical Industry Council
New Zealand Fire Service
Plastics and Chemicals Industry Association
Tranz Rail, New Zealand
Victorian WorkCover Authority
Work Health Authority, N.T.
WorkCover New South Wales
Workplace Standards Authority, Tasmania

Additional interests participating in preparation of Standard:

Agsafe Australia
Australian Environmental Pest Managers Association
Manufacturers, distributors and users of agricultural and veterinary chemicals

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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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 96227.

Australian Standard™

**The storage and handling of
agricultural and veterinary
chemicals**

Originated as AS 2507—1981.
Previous edition AS 2507—1984.
Third edition 1998.

Published by Standards Australia
(Standards Association of Australia)
1 The Crescent, Homebush, NSW 2140

ISBN 0 7337 2343 8

PREFACE

This Standard was prepared by Standards Australia/Standards New Zealand Committee CH/9, Safe Handling of Chemicals to supersede AS 2507—1984, *The storage and handling of pesticides*.

The objective of this Standard is to provide requirements and recommendations for the storage and handling of agricultural and veterinary chemicals, which may be classified as dangerous goods under the *Australian Dangerous Goods Code* (ADG Code) or as scheduled poisons by the *Standard for the Uniform Scheduling of Drugs and Poisons* (SUSDP).

The Standard is intended to be used by retailers and ‘end users’ of agricultural and veterinary chemicals, including farms and rural industries.

This Standard has been revised in order to ensure the currency of its technical information, and the opportunity has been taken to arrange the document into a format consistent with other Australian Standards for the storage and handling of dangerous goods. Major changes include the following:

- (a) The title has been changed to better describe the contents of the Standard.
- (b) Sections addressing operational and personal safety and emergency management have been expanded to align with the requirements given in other Australian Standards for the storage and handling of dangerous goods.
- (c) A Section on minor storage has been developed.
- (d) The information on waste disposal has been comprehensively revised to align with industry best practices and to address environmental concerns.

The series of Standards covering the storage and handling of dangerous goods presently comprises the following:

AS

- | | |
|------|---|
| 1894 | The storage and handling of non-flammable cryogenic and refrigerated liquids |
| 1940 | The storage and handling of flammable and combustible liquids |
| 2022 | Anhydrous ammonia—Storage and handling (known as the SAA Anhydrous Ammonia Code) |
| 2714 | The storage and handling of hazardous chemical materials—Class 5.2 substances (organic peroxides) |
| 2927 | The storage and handling of liquefied chlorine gas |
| 3780 | The storage and handling of corrosive substances |
| 3961 | Liquefied natural gas—Storage and handling |
| 4081 | The storage, handling and transport of liquid and liquefied polyfunctional isocyanates |
| 4326 | The storage and handling of oxidizing agents |
| 4332 | The storage and handling of gases in cylinders |

AS/NZS

- | | |
|------|---|
| 1596 | Storage and handling of LP Gas |
| 3833 | The storage and handling of mixed classes of dangerous goods in packages and intermediate bulk containers |
| 4452 | The storage and handling of toxic substances |

Attention has been paid to the requirements of regulatory authorities; emergency services and environmental authorities, and various publications of Worksafe Australia.

This Standard is a result of a consensus amongst Australian and New Zealand representatives on the Joint Committee that is to be produced as an Australian Standard.

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

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

Notes that appear in the main text of this Standard provide information only.

© 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	6
1.2 APPLICATION	6
1.3 REFERENCED DOCUMENTS	7
1.4 DEFINITIONS	7
1.5 PACKAGING	10
1.6 MARKING	10
1.7 REPACKAGING	11
1.8 SECURITY OF STORAGE AREAS	11
SECTION 2 MINOR STORAGE	
2.1 SCOPE OF SECTION	12
2.2 CRITERIA FOR CLASSIFICATION AS MINOR STORAGE	12
2.3 MINOR STORAGE REQUIREMENTS	12
2.4 OUTDOOR MINOR STORAGE	14
SECTION 3 DESIGN AND CONSTRUCTION OF STORAGE AREAS	
3.1 SCOPE OF SECTION	15
3.2 TYPES OF STORAGE AREA	15
3.3 PLANNING AND DESIGN	15
3.4 LOCATION OF STORAGE AREAS	16
3.5 CONSTRUCTION REQUIREMENTS	16
3.6 STORAGE LAYOUT	21
3.7 PUMPS	22
SECTION 4 OPERATIONAL AND PERSONNEL SAFETY	
4.1 SCOPE OF SECTION	25
4.2 GENERAL PRECAUTIONS	25
4.3 CONTROL OF IGNITION SOURCES	25
4.4 HOUSEKEEPING	26
4.5 EFFLUENT CONTROL	27
4.6 JOB KNOWLEDGE AND TRAINING	27
4.7 CONSTRUCTION AND MAINTENANCE WORK	28
4.8 INCIDENT REPORTING AND FOLLOW-UP	29
4.9 PERSONAL HYGIENE	29
4.10 PERSONAL PROTECTIVE EQUIPMENT (PPE)	29
4.11 FIRST AID KIT	30
SECTION 5 EMERGENCY MANAGEMENT	
5.1 SCOPE OF SECTION	31
5.2 PLANNING FOR EMERGENCIES	31
5.3 EMERGENCY COMMUNICATION	31
5.4 MANIFEST	31
5.5 PLACARDING	31
5.6 MANAGEMENT OF LEAKS AND SPILLS	32
5.7 REPACKAGING OF AGRICULTURAL AND VETERINARY CHEMICALS .	34

	<i>Page</i>
SECTION 6 FIRE PROTECTION	
6.1 SCOPE OF SECTION	35
6.2 GENERAL CONSIDERATIONS	35
6.3 FIRE-FIGHTING EQUIPMENT	35
6.4 ACTION IN THE EVENT OF FIRE	36
6.5 CLEAN-UP	36
SECTION 7 WASTE DISPOSAL AND DECONTAMINATION OF CONTAINERS	
7.1 SCOPE OF SECTION	37
7.2 HAZARDS	37
7.3 ITEMS FOR DISPOSAL	37
7.4 METHODS OF DISPOSAL	37
7.5 DECONTAMINATION OF CONTAINERS	37
APPENDICES	
A CLASSIFICATION AND IDENTIFICATION OF AGRICULTURAL AND VETERINARY CHEMICALS	38
B HEALTH HAZARDS AND FIRST AID	42
C LIST OF REFERENCED DOCUMENTS	47
D HAZARD ASSESSMENT	49
E BIBLIOGRAPHY OF DOCUMENTS PROVIDING GUIDELINES ON THE PREPARATION OF EMERGENCY PLANS	51
F INFORMATION TO BE INCLUDED IN THE WORK PERMIT	52
G SAMPLE INCIDENT REPORT FORM	53
H CLEANING OF PROTECTIVE EQUIPMENT AND CLOTHING	55
I INFORMATION TO BE INCLUDED FOR EMERGENCY SERVICES	56
J ACTION IN THE EVENT OF FIRE	57
K CONTAINER RINSING AND DISPOSAL	58

STANDARDS AUSTRALIA

Australian Standard

The storage and handling of agricultural and veterinary chemicals

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out requirements and recommendations for the safe storage and handling, by retailers and 'end user' industries (including farms and rural industries), of packaged agricultural and veterinary chemicals, comprising dangerous goods of Classes 3, 6.1, 8 and 9, 'minor storage' quantities of aerosols (UNI950) and of Class 4.3, and non-dangerous goods including scheduled poisons.

NOTES:

- 1 Examples of 'end user' industries are—
 - (i) pest control;
 - (ii) horticulture;
 - (iii) floriculture;
 - (iv) farms and other rural industries;
 - (v) recreation, including parks and gardens maintenance; and
 - (vi) national parks.
- 2 Agricultural and veterinary chemicals may be classified as workplace hazardous substances by NOHSC:1008 and listed in NOHSC:10005. As such they will also be subject to the legislative requirements relating to workplace hazardous substances. Recognition of the relevant requirements of the *Standard for the Uniform Scheduling of Drugs and Poisons* (SUSDP) is also necessary.
- 3 Classification and identification systems for dangerous goods and scheduled poisons are outlined in Appendix A.
- 4 A discussion of the health hazards presented by agricultural and veterinary chemicals and an outline of suitable first aid procedures are provided in Appendix B.

This Standard deals with the storage of packages, including intermediate bulk containers (IBCs) of capacity not exceeding 1.6 m³.

This Standard does not apply to—

- (a) the manufacture of agricultural and veterinary chemicals;
- (b) the bulk storage of agricultural and veterinary chemicals;
- (c) the storage and handling of Class 5.1 dangerous goods (including chlorate defoliants and ammonium nitrate fertilizers), which are addressed in AS 4326;
- (d) package filling lines;
- (e) the transport of agricultural and veterinary chemicals, which, if they are dangerous goods, is dealt with in the *Australian Dangerous Goods Code* (ADG Code); and
- (f) the use of agricultural and veterinary chemicals.

1.2 APPLICATION The requirements of this Standard apply in conjunction with, but do not take precedence over, any government regulations that apply in any area.

NOTES:

- 1 A store may come under the regulatory control of several authorities having differing areas of responsibility, and an approval from one authority does not necessarily constitute an approval from others.



SAI GLOBAL

This is a free 8 page sample. Access the full version online.

The remainder of this document
is available for purchase online at

www.saiglobal.com/shop

SAI Global also carries a wide range of publications from a wide variety of Standards Publishers:



Click on the logos to search the database online.