AS 1894:2025

Australian STANDARD®

STANDARDS Australia

The storage and handling of non-flammable cryogenic and refrigerated liquids



AS 1894:2025

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The following are represented on Committee CH-009:

- Accord Australasia
- Australasian Explosives Industry Safety Group
- Australasian Fire and Emergency Service Authorities Council
- Australasian Institute of Dangerous Goods Consultants
- Chemistry Australia
- ComCare (Commonwealth Government)
- CSIRO
- Department of Local Government, Industry Regulation and Safety - Western Australia
- Institution of Chemical Engineers
- National Retail Association of Australia
- National Transport Commission
- SafeWork NSW
- SafeWork SA

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Australian Standard®

The storage and handling of non-flammable cryogenic and refrigerated liquids

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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Australian members of the Standards Australia/Standards New Zealand Committee CH-009, Safe Handling of Chemicals, to supersede AS 1894:1997.

This document specifies requirements and recommendations for non-flammable cryogenic and refrigerated liquids classified as Class 2.2 (with or without a subsidiary hazard of 5.1) in the UN Recommendations on the Transport of Dangerous Goods and listed in the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

This document is also intended to promote the safety of persons, property and the environment where non-flammable cryogenic and refrigerated liquids are stored and handled, by providing requirements and recommendations based on industry good practice.

The major changes in this edition are as follows:

(a) Additional requirements for the handling of cryogenic containers, such as portable Dewars.

(b) Addition of requirements for loading and unloading areas.

(c) Incorporation of change management.

(d) Clarification of separation distances.

(e) Update of referenced documents.

(f) Clarification of medical gases.

The terms “normative” and “informative” are used in Standards to define the application of appendices to which they apply. A “normative” appendix is an integral part of the Standard, whereas an “informative” appendix is for information and guidance only.

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Introduction

While the storage and handling of dangerous goods may come under the regulatory control of several authorities having differing areas of responsibility, approval from one authority does not constitute approval from any other relevant body.

The Standards that cover the storage and handling of dangerous goods currently include the following:

AS 1940, *The storage and handling of flammable and combustible liquids*

AS 2507, *The storage and handling of agricultural and veterinary chemicals*

AS 2714, *The storage and handling of organic peroxides*

AS 2927, *The storage and handling of liquefied chlorine gas*

AS 3780, *The storage and handling of corrosive substances*

AS 3833, *The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers*

AS 3961, *The storage and handling of liquefied natural gas*

AS 4326, *The storage and handling of oxidizing agents*

AS 4332, *The storage and handling of gases in cylinders*

AS/NZS 1596, *The storage and handling of LP Gas*

AS/NZS 2022, *Anhydrous ammonia — Storage and handling*

AS/NZS 4081, *The storage and handling of liquid and liquefied polyfunctional isocyanates*

AS/NZS 4452, *The storage and handling of toxic substances*

AS/NZS 4681, *The storage and handling of Class 9 (miscellaneous) dangerous goods and articles*

AS/NZS 5026, *The storage and handling of Class 4 dangerous goods*

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