AS 4484:2016

Australian STANDARD

Gas cylinders for industrial, scientific, medical and refrigerant use—Labelling and colour coding

STANDARDS Australia

This Australian Standard® was prepared by Committee ME-002, Gas Cylinders. It was approved on behalf of the Council of Standards Australia on 6 May 2016.
This Standard was published on 20 May 2016.

The following are represented on Committee ME-002:

- Australasian Fire and Emergency Service Authorities Council
- Australia New Zealand Industrial Gas Association
- Australian Chamber of Commerce and Industry
- Australian Gas Association
- Engineers Australia
- Gas Energy Australia
- Gas Technical Regulators Committee
- National Association of Testing Authorities Australia
- SafeWork NSW
- Welding Technology Institute of Australia
- WorkSafe Victoria

This Standard was issued in draft form for comment as DR AS 4484:2015.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Gas cylinders for industrial, scientific, medical and refrigerant use—Labelling and colour coding

Originally in part as AS 1942—1976.
Revised and redesignated as AS 4484—1997.
Previous edition 2004.
Third edition 2016.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 499 2

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-002, Gas Cylinders, to supersede AS 4484—2004.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify the legible identification of the cylinder with the name or abbreviated symbol of the contained gas or, where applicable, its refrigerant number and the colours for the external cylinder surfaces.

This revision recognizes the completion of the change-over of the medical gas cylinders to the colour coding requirement in general accordance with ISO 32:1977, *Gas cylinders for medical use—Marking for identification of content*. This provides a means to identify certain medical gas cylinders by shoulder colour only. The letter 'N' markings on the shoulder of a medical gas cylinder, which were used to differentiate between the old and new colour schemes, are now redundant. As white is the colour assigned to the body of medical gas cylinders, it is not accepted as an alternative to Silver Grey.

The refrigerant numbers specified in this Standard are identical with those given in ISO 817:2014, *Refrigerants—Designation and safety classification*.

Certain gases have both refrigerant and industrial applications (e.g. ammonia, carbon dioxide, sulphur dioxide and, propane) and may be listed in Tables 1, 2 and 3. The allocation of identification colours then depends on the application for which the gas is intended.

Statements expressed in mandatory terms in notes to Tables and Figures are deemed to be requirements of this Standard.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Gas cylinders for industrial, scientific, medical and refrigerant use—Labelling and colour coding

1 SCOPE

This Standard specifies the requirements for labelling and colour coding to identify the contents of compressed gas cylinders for industrial, scientific, medical and refrigerant gases, which are used in accordance with AS 2030, Parts 1, 2, 4 and 5.

Colour coding includes special identification for eductor tubes to indicate liquid withdrawal.

This Standard applies to gas cylinders of water capacity in the range 0.1 kg to 150 kg used as single cylinders or in bundles of cylinders. Cylinders with a water capacity outside the above range, or where the total water capacity of a bundle of cylinders exceeds 810 L, with colour coding may follow this Standard.

This Standard does not apply to cylinders used for self-contained underwater breathing apparatus (SCUBA), self-contained breathing apparatus (SCBA), or fire extinguishing agents and portable fire extinguishers. For identification of these cylinders reference should be made to the relevant product or application Standard.

The colour coding requirements of this Standard do not apply to liquid petroleum gas (LP Gas) cylinders in a cylinder of 12 kg water capacity or less, which are usually considered for domestic use and are finished in a range of colours.

The colour coding requirements of this Standard do not apply to cylinders which are either imported for use but not refilling in Australia (colours of country of origin are applicable), nor for cylinders which are imported for the specific purpose of filling for export.

2 REFERENCED DOCUMENTS

The following Standards are referred to in this Standard:

AS	
2030	Gas cylinders
2030.1	Part 1: General requirements
2030.5	Part 5: Filling, inspection and testing of refillable cylinders
2030	The verification, filling, inspection, testing and maintenance of cylinders for the storage and transport of compressed gases
2030.2	Part 2: Cylinders for dissolved acetylene
2030.4	Part 4: Welded cylinders—Insulated
2473	Valves for compressed gas cylinders
2473.3	Part 3: Outlet connections for medical gases (including pin-indexed yoke connections)
2700	Colour standards for general purposes
2896	Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems
2902	Medical gas systems—Low pressure flexible hose assemblies