AS 2568:2019

Purity of medical air produced from on-site compressor systems

This Australian Standard® was prepared by Committee HE-017, Medical Gas Systems. It was approved on behalf of the Council of Standards Australia on 10 January 2019.
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The following are represented on Committee HE-017:

- Australia New Zealand Industrial Gas Association
- Australian and New Zealand College of Anaesthetists
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Society of Anaesthetists
- Engineers Australia
- Master Plumbers' Association of Queensland
- Master Plumbers Australia

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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.

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Australian Standard®

Purity of medical air produced from on-site compressor systems

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PREFACE

This Standard was prepared by the Standards Australia Committee HE-017, Medical Gas Systems, to supersede AS 2568—1991, *Medical gases—Purity of compressed medical breathing air*.

The objective of this Standard is to provide technical information on, and requirements for, the quality of medical air that is supplied to patients for clinical applications in healthcare facilities throughout Australia, including the maximum level of contaminants and the methods of testing the medical air supply during initial commissioning and the ongoing life of the medical air system.

This Standard is to be read in conjunction with AS 2896, *Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems*.

The changes in this edition are as follows:

(a) Clause 4 Terms and Definitions has been updated.

(b) Table 1 — Maximum allowable concentration of contaminants, the contaminant limits have been changed to reflect those from the European Pharmacopoeia, 9th edition monograph for air, medicinal.

(c) Test equipment has been substantially updated.

(d) Particular testing has been revised to meet the requirements of ISO 8573-1, *Compressed air—Part 1: Contaminants and purity classes*, Clause 6.12.

(e) For particulate matter, all references to BS 1701 have been replaced with references to ISO 8573-1.

(f) Sampling guidelines have been removed from the main text. They have been significantly expanded and moved to Appendix A (informative).

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Purity of medical air produced from on-site compressor systems

1 SCOPE

This Standard specifies minimum purity requirements for medical air delivered to the terminal units of a medical gas pipeline system from medical compressed air plants installed on-site. Requirements for gas analysis are also specified.

Applications for breathing air may use the specifications in this Standard as minimum requirements.

This Standard does not apply to air for process control, air for surgical tools including dental purposes, or air for other purposes not involving respiration.

NOTE: Users of this Standard should be aware that medical gas systems may be subject to regulatory requirements (e.g. from the Therapeutic Goods Administration), workplace health and safety regulatory authorities or plumbing industry authorities. Conformance with this Standard may not fulfil all such requirements.

2 APPLICATION

This Standard is to be read in conjunction with AS 2896, *Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems*, where the specific types of individual items of plant and equipment are detailed that will provide the necessary filtration, dehydration and pressure control required to meet the requirements of this Standard.

3 NORMATIVE REFERENCES

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

AS
2896 Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems

AS ISO/IEC
17025 General requirements for the competence of testing and calibration laboratories

ISO
8573 Compressed air
8573-1 Part 1: Contaminants and purity classes
8573-4 Part 4: Test methods for solid particle content

European Directorate for the Quality of Medicines and HealthCare
European Pharmacopoeia, 9th Edition, Council of Europe, 2016, pg 1653

4 TERMS AND DEFINITIONS

For the purpose of this Standard, the terms and definitions below apply.

4.1 Competent person

A person who has acquired, through education, training, qualification or experience or a combination of these, the knowledge and skill enabling that person to perform the task required.