# SINGAPORE STANDARD SS 548 : 2009 (ICS 13.340.30)

# CODE OF PRACTICE FOR

# Selection, use and maintenance of respiratory protective devices

(Formerly CP 74)

Published by SPRING Singapore 2 Bukit Merah Central Singapore 159835 SPRING Singapore Website: www.spring.gov.sg Standards Website: www.standards.org.sg



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ISBN 978-981-4278-17-1

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# Foreword

This Singapore Standard was prepared by a Working Group appointed by the Technical Committee for Personal Safety and Health under the purview of the General Engineering and Safety Standards Committee. It is a revision of the code of practice, CP 74 which was first prepared in 1998. CP 74 has been re-numbered as SS 548.

The revisions made were mainly to widen the scope of the Code to cover the use of the respiratory devices against biological and radioactive hazards. Other changes include updating the standard to ensure relevance to the latest regulations and good practices. The standard also includes additional information on selection, usage and maintenance of respirators, and medical examination for fitness to wear respirators.

In preparing this standard, reference was made to the following publications:

- 1. AS/NZS 1715 : 2009 Selection, use and maintenance of respiratory protective equipment
- 2. AS/NZS 2243.3 : 2002 Safety in laboratories Part 3 : Microbiological aspects and containment facilities
- 3. BS EN 529 : 2005 Respiratory protective devices Recommendations for selection, use, care and maintenance
- 4. Biological Agents and Toxins Act 2005
- 5 OSHA 1910.134 on Respiratory Protection
- 6. Practical Radiation Technical Manual, Personal Protective Equipment International Atomic Energy Agency 2004
- 7. Radiation Protection Act 2008
- 8. The Workplace Safety and Health Act (Chapter 354A) 2006
- 9. The Workplace Safety and Health (General Provisions) Regulations 2006
- 10. WHO Laboratory Biosafety Manual Third Ed 2004

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

#### NOTE

- 1. Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The revisions of Singapore Standards are announced through the issue of either amendment slips or revised editions.
- 2. Compliance with a Singapore Standard does not exempt users from legal obligations.

# Code of practice for selection, use and maintenance of respiratory protective devices

## 1 General

#### 1.1 Scope

This code sets forth accepted practices for respirator users. It provides information and guidance on the selection, use, and maintenance of respirators and contains recommendations for establishing respiratory protection programme. The code covers the use of respirators to protect persons against the inhalation of contaminants and oxygen-deficient atmospheres in the workplace.

The code does not cover the following:

- use of respirators under military combat conditions;
- life support ventilators for medical or resuscitation purposes;
- masks (including surgical masks);
- respirators used in a non-occupational setting (e.g. public health emergencies).

A mask is not a respiratory protective device. It has neither adequate filtering nor fitting attributes to provide respiratory protection for the wearer. It is designed to minimise contamination of the work environment or sterile field from large particles generated by the wearer (e.g. spit, mucous). It is not necessarily designed to eliminate air leakage around the edges.

#### 1.2 Purpose

The purpose of this code is to provide information and guidance on the selection, use and maintenance of respirators that will help safeguard the life and health of users. It also provides guidance on the planning and implementation of a respiratory protection programme.

### 2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AS/NZS 1715 Selection, use and maintenance of respiratory protective equipment

- CP 12 The filling, inspection, testing and maintenance of containers for the storage and transport of compressed gases
- CP 84 Entry into and safe working in confined space

### 3 Definitions

#### 3.1 Aerodynamic equivalent diameter

The diameter of a sphere of unit density (1 g/cc) that has the same gravitational settling velocity as the particle in question.