

**SINGAPORE STANDARD**

## **Medical face masks**

– Part 1 : Filtering half masks to protect against particles –  
Requirements, testing, marking

(This national standard is the identical implementation of EN 149:2001+A1:2009 and is adopted with permission of CEN, Rue de la Science 23 B - 1040 Brussels)

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## **National Foreword**

This Singapore Standard was prepared by the Technical Committee on Medical Devices under the purview of BHSC.

SS 669 consists of the following five parts, under the general title 'Medical face masks':

- Part 1: Filtering half masks to protect against particles – Requirements, testing, marking (Identical adoption of EN 149:2001+A1:2009)
- Part 2: Requirements and test methods (Identical adoption of EN 14683:2019+AC:2019)
- Part 3: Standard specification for performance of materials used in medical face masks (Identical adoption of ASTM F2100-19)
- Part 4: Standard test method for evaluating the bacterial filtration efficiency (BFE) of medical face mask materials, using a biological aerosol of *Staphylococcus aureus* (Identical adoption of ASTM F2101-19)
- Part 5: Standard test method for determining the initial efficiency of materials used in medical face masks to penetration by particulates using latex spheres [Identical adoption of ASTM F2299 / F2299M-03(2017)]

This standard is an identical adoption of EN 149:2001, "Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing, marking", including its Amendment, published by the European Committee for Standardisation, CEN, Avenue Marnix 17, B-1000 Brussels.

NOTE 1 – Where appropriate, the words "European Standard" are read as "Singapore Standard".

NOTE 2 – Where numerical values are expressed as decimals, the comma is read as a full point.

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3. *Compliance with a SS or TR does not exempt users from any legal obligations.*



# Medical face masks – Part 1: Filtering half masks to protect against particles – Requirements, testing, marking

## Introduction

A given respiratory protective device can only be approved when the individual components satisfy the requirements of the test specification which may be a complete standard or part of a standard, and practical performance tests have been carried out successfully on complete apparatus where specified in the appropriate standard. If for any reason a complete apparatus is not tested then simulation of the apparatus is permitted provided the respiratory characteristics and weight distribution are similar to those of the complete apparatus.

## 1 Scope

This European Standard specifies minimum requirements for filtering half masks as respiratory protective devices to protect against particles except for escape purposes.

Laboratory and practical performance tests are included for the assessment of compliance with the requirements.

## 2 Normative references

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

EN 132, *Respiratory protective devices – Definitions of terms and pictograms*

EN 134, *Respiratory protective devices – Nomenclature of components*

EN 143, *Respiratory protective devices – Particle filters - Requirements, testing, marking*

EN 13274-7, *Respiratory protective devices – Methods of test – Part 7: Determination of particle filter penetration*

ISO 6941, *Textile fabrics – Burning behaviour – Measurement of flame spread properties of vertically oriented specimens*