

**Hingamisteede kaitsevahendid.  
Sissehingamisventiilita, eraldatavate  
filtritega poolmaskid kaitseks gaaside  
või gaaside ja osakeste või ainult  
osakeste eest**

Respiratory protective devices. Half masks without inhalation valves and with separable filters to protect against gases or gases and particles or particles only

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1827:1999 sisaldab Euroopa standardi EN 1827:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1827:1999 consists of the English text of the European standard EN 1827:1999.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This European Standard specifies performance requirements, test methods and marking requirements for half masks without inhalation valves and with separable filters (designed for a maximum of single shift use) to protect against gases or gases and particles or particles only. It does not cover devices designed for use in circumstances where there is or might be an oxygen deficiency (oxygen less than 17% by volume) or for escape purposes.</p>	<p><b>Scope:</b> This European Standard specifies performance requirements, test methods and marking requirements for half masks without inhalation valves and with separable filters (designed for a maximum of single shift use) to protect against gases or gases and particles or particles only. It does not cover devices designed for use in circumstances where there is or might be an oxygen deficiency (oxygen less than 17% by volume) or for escape purposes.</p>
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**ICS** 13.340.30

**Võtmesõnad:** accident prevention, classifications, designation, filters, gases, instructions, marking, personal protective equipment, respiratory protective equipment, safety masks, specifications, tests

ICS 13.340.30

English version

Respiratory protective devices

Half masks without inhalation valves and with separable filters  
to protect against gases or gases and particles or  
particles only – Requirements, testing, marking

Appareils de protection respiratoire –  
Demi-masques sans soupape inspi-  
ratoire et avec filtres démontables,  
contre les gaz, contre les gaz et les  
particules, ou contre les particules  
uniquement – Exigences, essais,  
marquage

Atemschutzgeräte – Halbmasken  
ohne Einatemventile und mit trenn-  
baren Filtern zum Schutz gegen  
Gase, Gase und Partikeln oder nur  
Partikeln – Anforderungen, Prüfung,  
Kennzeichnung

This European Standard was approved by CEN on 1998-12-26.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 79 "Respiratory protective devices", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 1999, and conflicting national standards shall be withdrawn at the latest by July 1999.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 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 performance requirements, test methods and marking requirements for half masks (re-usable) without inhalation valves and with separable filters (designed for a maximum of single shift use) to protect against gases or gases and particles or particles only. It does not cover devices designed for use in circumstances where there is or might be an oxygen deficiency (oxygen less than 17 % by volume) or for escape purposes.

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

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 132	Respiratory protective devices - Definitions of terms and pictograms
EN 134	Respiratory protective devices - Nomenclature of components
EN 136	Respiratory protective devices - Full face masks - Requirements, testing, marking
prEN 141	Respiratory protective devices - Gas filters and combined filters - Requirements, testing, marking
prEN 143	Respiratory protective devices - Particle filters - Requirements, testing, marking
EN 148-1	Respiratory protective devices - Threads for facepieces - Part 1: Standard thread connection
EN 148-2	Respiratory protective devices - Threads for facepieces - Part 2: Centre thread connection
EN 148-3	Respiratory protective devices - Threads for facepieces - Part 3: Thread connection M 45 x 3
prEN 149	Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking

EN 371	Respiratory protective devices - AX gas filters and combined filters against low boiling organic compounds - Requirements, testing, marking
EN 372:1992	Respiratory protective devices - SX gas filters and combined filters against specific named compounds - Requirements, testing, marking
EN ISO 6941	Textile fabrics - Burning behaviour - Measurement of flame spread properties of vertically oriented specimens (ISO 6941:1984, including Amendment 1:1992)

### 3 Terms and definitions

For the purposes of this European Standard the definitions in EN 132 and the nomenclature from EN 134 apply.

Gas filters remove specified gases. Combined filters remove dispersed solid and/or liquid particles and specified gases. The term "gases" is taken to include vapours.

Particle filters remove solid and/or liquid particles.

A solid aerosol is defined as a dispersion of solid particles in air. A liquid aerosol is defined as a dispersion of liquid particles in air.

### 4 Description

A half mask without inhalation valves covers the nose and mouth and the chin, has no inhalation valves and may or may not have exhalation valves. It comprises a facepiece and separable and replaceable filters. It provides adequate sealing for the intended use on the face of the wearer against the ambient atmosphere, when the skin is dry or moist and when the head is moved.

Inhalation air enters through the filter and passes directly to the nose and mouth area of the device. Exhaled air passes through the filter and an exhalation valve (if fitted) to the ambient atmosphere.

In addition to providing protection against gases these devices can be designed to protect against both solid and liquid aerosols.

### 5 Classification

#### 5.1 General

Half masks shall be classified according to the types and classes of filters used.

#### 5.2 Filter types

Type FM A - for use against certain organic gases and vapours with a boiling point higher than 65 °C as specified by the manufacturer.

Type FM B - for use against certain inorganic gases and vapours as specified by the manufacturer (excluding carbon monoxide).

Type FM E - for use against sulfur dioxide and other acid gases and vapours as specified by the manufacturer.