HINGAMISTEEDE KAITSEVAHENDID. OSAKESTE EEST KAITSVAD FILTREERIVAD POOLMASKID. NÕUDED, KATSETAMINE, MÄRGISTUS

Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 149:2003+A1:20 sisaldab Euroopa standardi 149:2001+A1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 149:2003+A1:2009 consists of the English text of the European standard EN 149:2001+A1:2009.
Standard on jõustunud sellekohase te avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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## **EUROPEAN STANDARD**

### EN 149:2001+A1

# NORME EUROPÉENNE EUROPÄISCHE NORM

May 2009

ICS 13.340.30

Supersedes EN 149:2001

#### **English Version**

# Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking

Appareils de protection respiratoire - Demi-masques filtrants contre les particules - Exigences, essais, marquage

Atemschutzgeräte - Filtrierende Halbmasken zum Schutz gegen Partikeln - Anforderungen, Prüfung, Kennzeichnung

This European Standard was approved by CEN on 8 March 2001 and includes Corrigendum 1 issued by CEN on 24 July 2002 and Amendment 1 approved by CEN on 26 March 2009.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

## Contents

		Page
Foreword.		4
Introduction	on	4
1	Scope	4
2	Normative references	5
3	Terms and definitions	5
4	Description	5
5	Classification	5
6	Designation	6
7	Requirements	
7.1	General	
7.2	Nominal values and tolerances	
7.3	Visual inspection	6
7.4	Packaging	6
7.5	Material	6
7.6	Cleaning and disinfecting	
7.7	Practical performance	7
7.8	Finish of parts	
7.9	Leakage	7
7.10	Compatibility with skin	8
7.11	Flammability	
7.12	Carbon dioxide content of the inhalation air	9
7.13	Head harness	
7.14	Field of vision	9
7.15	Exhalation valve(s)	
7.16	Breathing resistance	
7.17	Clogging	

7.18	Demountable parts	11
8	Testing	11
8.1	General	11
8.2	Visual inspection	11
8.3	Conditioning	11
8.4	Practical performance	12
8.5	Leakage	13
8.6	Flammability	16
8.7	Carbon dioxide content of the inhalation air	17
8.8	Strength of attachment of exhalation valve housing	18
8.9	Breathing Resistance	
8.10	Clogging	
8.11	Penetration of filter material	20
9	Marking	21
9.1	Packaging	21
9.2	Particle filtering half mask	21
10	Information to be supplied by the manufacturer	22
Annex A	A (informative) Marking	38
	ZA (informative) Clauses of this European Standard addressing essential requiremons of EU Directives	
Bibliogra	raphy	41
		5

#### Foreword

This document (EN 149:2001+A1:2009) 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 November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

This European Standard supersedes [A] EN 149:2001 (A1).

This European Standard was approved by CEN on 8 March 2001 and includes Corrigendum 1 issued by CEN on 24 July 2002 and Amendment 1 approved by CEN on 26 March 2009.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A)

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags (AC).

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.

Annex A is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, 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 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. (4)

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 (A)

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

#### 3 Terms and definitions

For the purposes of this European Standard the definitions given in EN 132 and the nomenclature given in EN 134 apply  $\boxed{\mathbb{A}}$  together with the following:

#### 3.1

#### re-useable particle filtering half mask

particle filtering half mask intended to be used for more than a single shift [A]

#### 4 Description

A particle filtering half mask covers the nose and mouth and the chin and may have inhalation and/or exhalation valve(s). The half mask consists entirely or substantially of filter material or comprises a facepiece in which the main filter(s) form an inseparable part of the device.

It is intended to provide adequate sealing on the face of the wearer against the ambient atmosphere, when the skin is dry or moist and when the head is moved.

Air enters the particle filtering half mask and passes directly to the nose and mouth area of the facepiece or, via an inhalation valve(s) if fitted. The exhaled air flows through the filter material and/or an exhalation valve (if fitted) directly to the ambient atmosphere.

These devices are designed to protect against both solid and liquid aerosols.

#### 5 Classification

Particle filtering half masks are classified according to their filtering efficiency and their maximum total inward leakage. There are three classes of devices:

FFP1, FFP2 and FFP3.

The protection provided by an FFP2 - or FFP3 - device includes that provided by the device of lower class or classes.

In addition, particle filtering half masks are classified as single shift use only or as re-usable (more than one shift). (A)