

**Hingamisteede kaitsevahendid.
Sundventilatsiooniga filtreerimisvahendid, millel
on kiiver või kapuuts. Nõuded, katsetamine,
märgistus**

Respiratory protective devices - Powered filtering
devices incorporating a helmet or a hood -
Requirements, testing, marking

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12941:1999 sisaldab Euroopa standardi EN 12941:1998 ingliskeelset teksti.

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EUROPEAN STANDARD
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EN 12941

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Supersedes EN 146:1991

Descriptors: accident prevention, personal protective equipment, filters, helmets, classifications, design, specifications, tests, technical notices, marking

English version

Respiratory protective devices - Powered filtering devices
incorporating a helmet or a hood - Requirements, testing,
marking

Appareils de protection respiratoire - Appareils filtrants à
ventilation assistée avec casque ou capote - Exigences,
essais, marquage

Atemschutzgeräte - Gebläsefiltergeräte mit einem Helm
oder einer Haube - Anforderungen, Prüfung,
Kennzeichnung

This European Standard was approved by CEN on 24 August 1998.

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.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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Contents

	Foreword	3		
	Introduction	4		
1	Scope	4	7	Testing
2	Normative references	4	7.1	Conditioning
3	Definitions and description	5	7.2	Visual inspection
4	Designation	6	7.3	Inward leakage
5	Classification	6	7.4	Field of vision
6	Requirements	6	7.5	Visor robustness
6.1	Materials	6	7.6	Breathing resistance
6.2	Resistance to temperature	7	7.7	Air supply flow rate
6.3	Helmets and hoods	7	7.8	Clogging
6.4	Inward leakage	8	7.9	Resistance to collapse of breathing hose
6.5	Breathing resistance	8		
6.6	Air supply	9	7.10	Strength of hose and couplings and of connection between hood and breathing hose
6.7	Checking and warning facilities	9		
6.8	Clogging	9		
6.9	Electrical components	10	7.11	Mechanical strength of filters
6.10	Breathing hose	10	7.12	Filters
6.11	Filters	11	7.13	Noise level
6.12	Noise level	15	7.14	Carbon dioxide content of inhalation air
6.13	Carbon dioxide content of inhalation air	15	7.15	Resistance to flame
6.14	Resistance to flame	16	7.16	Practical performance
6.15	Exhalation means	16	7.17	Material porosity
6.16	Mass	16	8	Marking
6.17	Practical performance	16	9	Information supplied by the manufacturer
				54
Annex A (informative)	Fitting procedure for hoods which seal around the neck and which may or may not incorporate a head harness			56
Annex B (informative)	Marking			60
Annex ZA (informative)	Clauses of this European Standard addressing essential requirements or other provisions of EU Directives			61

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 replaces EN 146:1991.

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 April 1999, and conflicting national standards shall be withdrawn at the latest by April 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.

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Introduction

A given respiratory protective device incorporating a helmet or a hood 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 powered filtering devices incorporating a helmet or a hood with gas, particle or combined filter(s) for respiratory protection. 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). Also, it does not cover respiratory protective devices designed 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.

- | | |
|---------------|---|
| prEN 132:1996 | Respiratory protective devices - Definitions |
| EN 134:1998 | Respiratory protective devices - Nomenclature of components |
| EN 136:1998 | Respiratory protective devices - Full face masks - Requirements, testing, marking |
| EN 140:1998 | Respiratory protective devices - Half masks and quarter masks - Requirements, testing, marking |
| prEN 143:1997 | Respiratory protective devices - Particle filters - Requirements, testing, marking |
| EN 148-1:1987 | Respiratory protective devices - Threads for facepieces - Standard thread connection |
| EN 166:1995 | Personal eye protection - Specifications |
| EN 169:1992 | Personal eye protection - Filters for welding and related techniques - Transmittance requirements and recommended use |
| EN 170:1992 | Personal eye protection - Ultraviolet filters - Transmittance requirements and recommended use |
| EN 171:1992 | Personal eye protection - Infrared filters - Transmittance requirements and recommended use |

- EN 379:1994 Specification for welding filters with switchable luminous transmittance and welding filters with dual luminous transmittance
- EN 397:1995 Industrial safety helmets
- EN ISO 6941:1995 Textile fabrics - Burning behaviour - Measurement of flame spread properties of vertically oriented specimens
- EN 50 014:1992 Electrical apparatus for potentially explosive atmospheres - General requirements
- EN 50 020:1994 Electrical apparatus for potentially explosive atmospheres - Intrinsic safety "i"
- IEC 651:1979 Sound level meters

3 Definitions and description

3.1 Definitions

For the purposes of this European Standard the definitions given in prEN 132 and the nomenclature given in EN 134 apply together with the following.

3.1.1 Powered filtering device incorporating a helmet or hood: A device, dependent on the ambient air, incorporating:

- one or more particle filter(s) providing protection against solid or liquid aerosols of negligible volatility and decomposition, or a combination of such aerosols, or
- one or more gas filter(s) providing protection against specified gases and vapours, or
- one or more combined filter(s) providing protection against dispersed solid and/or liquid particles as defined above, and specified gases and vapours
- and a turbo unit supplying the filtered air to a facepiece, which can be a hood or a helmet.

3.2 Description

The device typically consists of:

- a) a facepiece which can be a hood as defined in prEN 132 or a device which seals on the face, excluding facepieces specified in EN 136 or EN 140. Either type of facepiece may incorporate a helmet e.g. to provide head protection against mechanical impact and/or a visor to provide eye and face protection against given risks, possibly combined,
- b) a turbo unit designed to be carried/worn by the wearer which supplies filtered ambient air to the facepiece. The energy supply for the turbo unit may or may not be carried on the person,
- c) a filter or filters through which all air supplied passes,
- d) exhalation valves or other outlets depending on the design by which exhaled air and air in excess of the wearer's demand is discharged.