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Respiratory protective devices - Particle filters - Requirements, testing, marking

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky

STN EN 143: 2021

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 143

February 2021

ICS 13.340.30

Supersedes EN 143:2000

**English Version** 

### Respiratory protective devices - Particle filters -Requirements, testing, marking

Appareils de protection respiratoire - Filtres à particules - Exigences, essais, marquage

Atemschutzgeräte - Partikelfilter - Anforderungen, Prüfung, Kennzeichnung

This European Standard was approved by CEN on 4 January 2021.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## Contents

Europe	ean foreword	3	
1	Scope	4	
2	Normative references	4	
3	Terms, definitions and symbols		
3.1 3.2	Terms and definitions Symbols		
4	Classification		
4 5	Designation		
-	Requirements		
6 6.1	General		
6.2	Values and tolerances		
6.3	Connection		
6.4	Ergonomics	7	
6.5	Mass		
6.6	Twin or multiple filter devices		
6.7	Design		
6.8	Materials	-	
6.9	Packaging		
6.10	Conditioning Temperature		
	Mechanical strength		
6.11	Inhalation resistance		
6.12	Filter penetration		
7	Testing	9	
7.1	Test performance		
7.1.1	General	9	
7.1.2	Test flow conditions		
7.2	Test schedule		
7.3	Inspection		
7.4	Conditioning		
7.4.1	Temperature Mechanical strength		
7.4.2 7.5	Inhalation resistance		
7.5 8			
8.1	Marking General		
8.2	Filters		
8.3	Filter package		
9	Information supplied by the manufacturer		
Annex ZA (informative) Relationship between this European Standard and the essential			
health and safety requirements of Regulation 2016/425/EU [2016 OJ L81] aimed to			
	be covered	. 15	
Biblio	Bibliography		

### **European foreword**

This document (EN 143:2021) 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 August 2021, and conflicting national standards shall be withdrawn at the latest by August 2021.

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

This document supersedes EN 143:2000, EN 143:2000/A1:2006 and EN 143:2000/AC:2005.

The following main technical changes have been made compared to EN 143:2000:

- a) definitions and symbols added;
- b) description deleted;
- c) nominal values and tolerances changed;
- d) use of a risk assessment, e.g. a Failure Modes and Effect Analysis (FMEA) added;
- e) twin filters added;
- f) clogging deleted;
- g) visual inspection changed to inspection and detailed list inserted;
- h) filter penetration test changed to refer to EN 13274-7;
- i) marking changed to filters in general;
- j) all figures adapted to the changes made in the test procedures, where appropriate.

This document 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 document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### 1 Scope

This document specifies particle filters for use as replaceable components in unassisted respiratory protective devices (RPD) with the exception of escape devices and filtering face pieces.

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

Some filters complying with this document can also be suitable for use with other types of respiratory protective devices and/or escape devices. If so, they need to be tested and marked according to the appropriate European Standard.

This document does not cover requirements concerning respiratory hygiene. Requirements for decrease of the microbiological hazards caused by the growth of bacteria and viruses on the filtration material are not determined.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 ISO 16972:2020, Respiratory protective devices - Vocabulary and graphical symbols (ISO 16972:2020)

EN 134:1998, Respiratory protective devices - Nomenclature of components

EN 148-1:2018, Respiratory protective devices - Threads for facepieces - Part 1: Standard thread connection

EN 13274-3:2001, Respiratory protective devices - Methods of test - Part 3: Determination of breathing resistance

EN 13274-7:2019, Respiratory protective devices - Methods of test - Part 7: Determination of particle filter penetration

koniec náhľadu – text ďalej pokračuje v platenej verzii STN