



**SLOVENSKI STANDARD**  
**SIST EN 1073-1:2016/oprA1:2017**  
**01-november-2017**

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**Varovalna obleka pred trdnimi lebdečimi delci, vključno z radioaktivno kontaminacijo - 1. del: Zahteve in preskusne metode za varovalno obleko z dovodom zraka za zaščito pred onesnaženjem z radioaktivnimi delci - Dopolnilo A1**

Protective clothing against solid airborne particles including radioactive contamination - Part 1: Requirements and test methods for compressed air line ventilated protective clothing, protecting the body and the respiratory tract

Schutzkleidung gegen feste Partikel einschließlich radioaktiver Kontamination - Teil 1: Anforderungen und Prüfverfahren für belüftete Schutzkleidung zum Schutz des Körpers und der Atemwege

Habillement de protection contre les particules solides en suspension dans l'air, incluant la contamination radioactive - Partie 1 : Exigences et méthodes des vêtements de protection ventilés par une adduction d'air comprimé protégeant le corps et le système respiratoire

**Ta slovenski standard je istoveten z: EN 1073-1:2016/prA1**

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**ICS:**

13.280	Varstvo pred sevanjem	Radiation protection
13.340.10	Varovalna obleka	Protective clothing

**SIST EN 1073-1:2016/oprA1:2017**      **en,fr,de**



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NORME EUROPÉENNE  
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**DRAFT**  
**EN 1073-1:2016**  
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ICS 13.280; 13.340.10

English Version

**Protective clothing against solid airborne particles  
including radioactive contamination - Part 1:  
Requirements and test methods for compressed air line  
ventilated protective clothing, protecting the body and the  
respiratory tract**

Vêtements de protection contre les particules solides  
en suspension dans l'air, incluant la contamination  
radioactive - Partie 1: Exigences et méthodes des  
vêtements de protection ventilés par une adduction  
d'air comprimé protégeant le corps et le système  
respiratoire

Schutzkleidung gegen feste Partikel einschließlich  
radioaktiver Kontamination - Teil 1: Anforderungen  
und Prüfverfahren für belüftete Schutzkleidung, zum  
Schutz des Körpers und der Atemwege

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 162.

This draft amendment A1, if approved, will modify the European Standard EN 1073-1:2016. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 1073-1:2016/prA1:2017) has been prepared by Technical Committee CEN/TC 162 “Protective clothing including hand and arm protection and lifejackets”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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 Regulation (EU) 2016/425.

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

## EN 1073-1:2016/prA1:2017 (E)

**1 Modification to Clause 3, "Terms and definitions"**

In the definition for term 3.3 replace:

“ratio of the concentration of contaminant in the ambient atmosphere to the concentration of the contaminant in the suit. The concentrations taken into account are the average concentrations recorded during a standardized test”

with

“ratio of the concentration of contaminant in the ambient atmosphere to the concentration of the contaminant in the suit

NOTE The concentrations taken into account are the average concentrations recorded during a standardized test.”.

**2 Modification to 4.2, "Materials"**

Replace Table 1 with the following new Table 1:

"

**Table 1 – Requirements for the materials**

Requirement	Test according to	For each material of reusable garment		For each material of single use or limited use garments		
		Required test	Minimum required class	Required test	Minimum required class for NPF class 1 to 4 suits	Minimum required class for NPF class 5 suits
Resistance to abrasion	EN 14325	Yes	3	Yes	1	2
Resistance to flex cracking	EN 14325	Yes	1	Yes	1	1
Puncture resistance	EN 14325	Yes	2	Yes	2	2
Tear resistance	EN 14325	Yes	3	Yes	1	2
Ignition resistance of materials, visor and ancillary parts	EN 14325	Yes	—	Yes	—	—

"

**3 Modification to 4.3, "Nominal protection factor"**

In Table 2, Note 1, replace "Annex B" with "Annex A".

#### **4 Modification to 4.5, "Visor"**

*In Table 3, in the 1st row, 2<sup>nd</sup> column, replace "Annex C" with "Annex B".*

*In the 2<sup>nd</sup> row, 1<sup>st</sup> column, replace "Field of vision" with "Ability to perform work".*

*In the 2<sup>nd</sup> row, 2<sup>nd</sup> column, replace "The field of vision shall be sufficiently adequate to allow the test subject to carry out all activities of the practical performance test"*

*with*

*"The use of the equipment shall be sufficiently adequate to allow the test subject to carry out all activities of the practical performance test".*

*In the last sentence of 4.5, replace "The field of vision may also be evaluated according to Annex D."*

*with*

*"The field of vision shall be evaluated according to Annex C by two test subjects on two different samples. The results shall be recorded in the test report."*

#### **5 Modification to 4.8, "Air flow rate warning device"**

*In the 2<sup>nd</sup> paragraph, delete "If fitted to the suit" to read "Two warning devices shall be tested."*

#### **6 Modification to 4.10, "Exhaust devices"**

*In the 2<sup>nd</sup> sentence, replace "signs of damage or failure" with "signs of damage or failure, e.g. cracking, deformation."*

## EN 1073-1:2016/prA1:2017 (E)

**7 Modification to 5.1.3, "Conditioning for storage on samples and pre-treatment for reusable suits"**

*In the 3<sup>rd</sup> paragraph, replace:*

"The preconditioned samples shall also be pre-treated as follows:

- If the manufacturer's instructions indicate that cleaning or disinfection is not allowed, i.e. single use garments, no pretreatment is required.
- If the manufacturer's instructions indicate that multiple use of garments is allowed, but that re-use of the garment is not permitted once the garment has been contaminated, i.e. limited-use garments, then testing shall be conducted on material which has been pre-treated by cleaning and disinfection only. The cleaning and disinfection shall be in line with the manufacturer's instructions, on the basis of standardized procedures. If the number of cleaning and disinfection cycles is not specified, the tests shall be carried out after 5 cycles of pre-treatment, each consisting of one wash cycle, one dry cycle and one disinfection cycle carried out in the sequence as indicated by the manufacturer's instructions. This shall be reflected in the information supplied by the manufacturer. If the garment can be washed or alternatively dry-cleaned it shall only be washed, dried and disinfected. If only dry-cleaning is allowed, the garment shall only be dry-cleaned and disinfected in accordance with the manufacturer's instructions.
- If the manufacturer's instructions indicate that cleaning, disinfection and decontamination is allowed, testing shall be carried out on material, which has been pre-treated by cleaning, disinfection and decontamination. If the number of cleaning, disinfection and decontamination cycles is not specified, the tests shall be carried out after 5 cycles of pre-treatment, each consisting of one cycle of pre-treatment by cleaning, disinfection and decontamination carried out in the sequence as indicated in the manufacturer's instructions. This shall be reflected in the information supplied by the manufacturer. If the manufacturer's instructions specify different decontamination procedures for different hazards, testing shall be carried out on material which has been pre-treated by cleaning, disinfection and decontamination according to each of listed decontamination procedures, i.e. testing of as many pre-treated materials as there are specified decontamination procedures."

*with*

"The preconditioned samples shall also be pre-treated as follows:

- If the manufacturer's instructions indicate that cleaning or disinfection is not allowed, i.e. single use or limited use garments, no pre-treatment is required.
- Where applicable according to manufacturer's instruction, the cleaning and disinfection shall be in line with the manufacturer's instructions, on the basis of standardized procedures. If the number of cleaning and disinfection cycles is not specified, the tests shall be carried out after 5 cycles of pre-treatment, each consisting of one wash cycle, one dry cycle and one disinfection cycle carried out in the sequence as indicated by the manufacturer's instructions. This shall be reflected in the information supplied by the manufacturer. If the garment can be washed or alternatively dry-cleaned it shall only be washed, dried and disinfected. If only dry-cleaning is allowed, the garment shall only be dry-cleaned and disinfected in accordance with the manufacturer's instructions."



## 8 Modification to 5.2.1, "General"

*In the fourth paragraph, replace:*

“After fitting the suit, each test subject is asked "Does the suit fit?" If the answer is "Yes" the subject shall proceed with the test. If the answer is "No", report the fact and either replace the suit or the test subject. If the suit doesn't fit any test subject within the given size range the sizing table shall be reported as incorrect and the suit test shall be reported as failure.”

*with*

“After fitting the suit, each test subject is asked "Does the suit fit?" If the answer is "Yes" the subject shall proceed with the test. If the answer is "No", report the fact and either replace the suit or the test subject. The test subject is then asked again "Does the suit fit?". If the answer is “Yes”, the subject shall proceed with the test. If the answer is “No”, or if the suit doesn't fit any test subject within the given size range, the sizing table shall be reported as incorrect and the suit test shall be reported as failure.”.

## 9 Modification to 5.4, "Determination of the nominal protection factor"

*In the second paragraph, replace “Annex B” with “Annex A”.*

## 10 Modification to 5.6, "Exhaust device pull test"

*In the first paragraph, replace “Mount the suit on a dummy torso which can be adjusted so that the load can be applied axially to the exhaust device.”*

*with*

“Mount the suit on a dummy torso. The load shall be applied in the direction that is most likely to cause damage or separation.”.

*Replace “Figure 2 – Applied force on the exhaust device pull test”*

*with*

**“Figure 2 – Example of applied force on the exhaust device pull test”.**

*In the last paragraph of 5.6, replace “signs of damage or failure.” with “signs of damage or failure, e.g. cracking, deformation.”.*

## 11 Modification to 5.9, "Emergency breathing/escape device protection test"

*In the first paragraph, replace “Annex B” with “Annex A”.*

## 12 Deletion of Annex A, "Material tests – Resistance to ignition"

*Delete Annex A.*

## 13 Modifications to Annex B "Total inward leakage test" to Annex E "Environmental issues"

*Considering the deletion of Annex A (previous clause) change the numbering of all Clauses, Tables and Figures and cross-references.*