EESTI STANDARDEVS-EN ISO 13688:2013+A1:2021

# KAITSERIIETUS. ÜLDNÕUDED

# Protective clothing - General requirements (ISO 13688:2013 + ISO 13688:2013/Amd 1:2021)



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 13688:2013 +A1:2021 sisaldab Euroopa standardi EN ISO 13688:2013 ja selle muudatuse A1:2021 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 13688:2013 +A1:2021 consists of the English text of the European standard EN ISO 13688:2013 and its amendment A1:2021.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.		
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 17.07.2013, muudatus A1 29.09.2021.	Date of Availability of the European standard is 17.07.2013, for A1 29.09.2021.		
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega A1 (A1.	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags $A_1$ $A_1$ .		
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.		
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Fagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilebel asuvat tagasiside vorr			

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ICS 13.340.10

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# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN ISO 13688 + A1

July 2013, September 2021

ICS 13.340.10

Supersedes EN 340:2003

**English Version** 

# Protective clothing - General requirements (ISO 13688:2013 + ISO 13688:2013/Amd 1:2021)

Vêtements de protection - Exigences générales (ISO 13688:2013 + ISO 13688:2013/Amd 1:2021)

Schutzkleidung - Allgemeine Anforderungen (ISO 13688:2013 + ISO 13688:2013/Amd 1:2021)

This European Standard was approved by CEN on 25 April 2013. Amendment A1 was approved by CEN on 20 February 2021.

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

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Ref. No. EN ISO 13688:2013: E + EN ISO 13688:2013/A1:2021 E

### Foreword

This document (EN ISO 13688:2013) has been prepared by Technical Committee ISO/TC 94 "Personal safety - Protective clothing and equipment" in collaboration with Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets" 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 January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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This document supersedes EN 340:2003.

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.

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

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#### **Endorsement notice**

The text of ISO 13688:2013 has been approved by CEN as EN ISO 13688:2013 without any modification.

## Amendment A1 European foreword

This document (EN ISO 13688:2013/A1:2021) has been prepared by Technical Committee ISO/TC 94 "Personal safety - Personal protective equipment" in collaboration with Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets" the secretariat of which is held by DIN.

This Amendment to the European Standard EN ISO 13688:2013 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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

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Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN websites.

This amendment EN ISO 13688:2013/A1:2021 modifies EN ISO 13688:2013 with the following main changes:

- Foreword, replacement of "shoulder length" with "shoulder point";
- Clause 2, Clause 6 and following sub-clauses (4.2, 5.3, 7.2): some normative references have been updated (ISO 8559-1 and ISO 8559-2 replacing ISO 3635) and all the normative references have been dated (except ISO 7000);
- Definition 3.6, the expression has been change with "waist to waist over the shoulder line";
- Sub-clause 5.2, the series ISO 3175 has been extended to Parts 5 and 6;
- Clause 6, Table A.1 has been updated in order to take into consideration the replacement of ISO 3635 by ISO 8559-1 and ISO 8559-2;
- Sub-clause 7.1, it has been detailed that "10 mm" refers to the number height;
- Sub-clause 7.2, the use of pictogram(s) has been redrafted;
- In Figure D.3, the lines representing the breast have been removed;
- In Figure D.4, the expression "for men" has been removed;
- In Table E.1, the pictograms of "date of manufacture", "use by date" and "protection against the thermal effect of electric arc" have been added;
- Annex ZA has been modified in order to refer to Regulation (EU) 2016/425.

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#### **Endorsement notice**

and 1-22 The text of ISO 13688:2013/Amd 1:2021 has been approved by CEN as EN ISO 13688:2013/A1:2021 without any modification. A

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 13688 was prepared by Technical Committee ISO/TC 94, *Personal safety - Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing* and by Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets* in collaboration.

This second edition cancels and replaces the first edition (ISO 13688:1998), which has been technically revised to include the following changes:

- A statement that this International Standard (and pictogram) is intended to be used in combination with another product standard was added to the Scope.
- A Additional definitions on waist to waist over the shoulder line, and torso. (A
- Notes on level of performance moved to informative Annex A.
- Clause 4 on ergonomics changed to basic health and ergonomic requirements and revised into separate sub-sections: general (4.1), innocuousness (4.2), design (4.3) and comfort (4.4).
- Informative Annex C added on ergonomic features.
- Subclause 5.2 on colour fastness removed.
- Subclause 5.3 on cleaning renamed as washing and dry-cleaning (5.2) now includes reference to standardised processes, including industrial washing.
- Strengthened provisions in 5.3 on dimensional change due to cleaning.
- The size designation system in Clause 6 was simplified with regard to intervals and ranges to allow more freedom to obtain a better individual fit.
- Subclause 7.2 on specific marking amended to include qualification labelling for industrial laundry care.
- Informative Annex B (Flow chart) added on acceptability of materials.
- Informative Annex F added on environmental aspects.

# An Amendment A1 foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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This document was prepared by ISO/TC 94, *Personal safety* — *Personal protective equipment*, SC 13, *Protective clothing*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>. (A)

# Introduction

<text> This International Standard is a reference standard to be called up as appropriate by specific standards. This International Standard is not intended to be used alone but only in combination with another standard containing requirements for the specific performance of the product which provides protection.

# **Protective clothing — General requirements**

# 1 Scope

This International Standard specifies general performance requirements for ergonomics, innocuousness, size designation, ageing, compatibility and marking of protective clothing and the information to be supplied by the manufacturer with the protective clothing.

This International Standard is only intended to be used in combination with other standards containing requirements for specific protective performance and not on a stand-alone basis.

### 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.

A) ISO 3071:2020, Textiles — Determination of pH of aqueous extract

ISO 3175-1:2017, Textiles — Professional care, drycleaning and wetcleaning of fabrics and garments — Part 1: Assessment of performance after cleaning and finishing

ISO 3758:2012, Textiles — Care labelling code using symbols

ISO 4045:2018, Leather — Chemical tests — Determination of pH

ISO 5077:2007, Textiles — Determination of dimensional change in washing and drying

ISO 7000, Graphical symbols for use on equipment — Registered symbols

ISO 8559-1:2017, Size designation of clothes — Part 1: Anthropometric definitions for body measurement

ISO 8559-2:2017, Size designation of clothes — Part 2: Primary and secondary dimension indicators

ISO 14362-1:2017, Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres

ISO 14362-3:2017, Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene

ISO 17075-1:2017, Leather — Chemical determination of chromium(VI) content in leather — Part 1: Colorimetric method

ISO 17075-2:2017, Leather — Chemical determination of chromium(VI) content in leather — Part 2: Chromatographic method

ISO 30023:2010, Textiles — Qualification symbols for labelling workwear to be industrially laundered

EN 1811:2011+A1:2015, Reference test method for release of nickel from products intended to come into direct and prolonged contact with the skin  $(A_1)$