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Interested committees:

Title: Draft BS EN ISO 14116 .2 Protective clothing — Protection against flame — Limited flame spread materials, material assemblies and clothing.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

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Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

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Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 14116.2

Protective clothing — Protection against flame — Limited flame spread materials, material assemblies and clothing

*Vêtements de protection — Protection contre les flammes
— Matériaux, assemblages de matériaux et vêtements à
propagation de flamme limitée*

ICS: 13.340.10

ISO/TC 94/SC 13

Secretariat: **SNV**

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2025-01-24

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

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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.

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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 94, *Personal safety - Personal protective equipment*, Subcommittee SC 13, *Protective clothing*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 14116:2015), which has been technically revised.

The main changes are as follows:

- number of samples or test specimens required for testing specified in each relevant clause;
- throughout the document 'zippers' changed to 'slide fasteners';
- tear strength requirement for nonwovens aligned with wovens at 7,5 N;
- dimensional change of textile materials defined for woven materials versus knitted, nonwoven materials and quilted liners;
- correction made to burst strength in 6.5 related to 7,3 cm² test area. Corrected from 200 kPa to 260 kPa based on Pascal's law; a diameter of 50 cm² is 7,98 cm, and a diameter of 7,3 cm² is 3,05 cm. The ratio of the diameter is 2,61;
- expanded guidance on uncertainty of measurement in Annex A;
- risk assessment is described in Annex C;
- addition of Table ZA.2 to Annex ZA;
- updated bibliography.

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 www.iso.org/members.html.

Introduction

The purpose of this document is to provide minimum performance requirements for clothing in order to reduce the possibility of the clothing and/or its materials burning when in occasional and brief contact with small flames and thereby, itself constituting a hazard.

For complete protection against exposure to flame, it will be necessary to protect the head, face, hands, and/or feet with suitable PPE and, in some cases, appropriate respiratory protection might also be considered necessary.

Attention is drawn to ISO/TR 2801:2007,^[1] which sets out guidelines for selection, use, care, and maintenance of protective clothing against flame.

Nothing in this document is intended to restrict any jurisdiction, purchaser, or manufacturer from exceeding these minimum requirements.

Protective clothing — Protection against flame — Limited flame spread materials, material assemblies and clothing

1 Scope

This document specifies the performance requirements for the limited flame spread properties of all materials, all material assemblies, and protective clothing in order to reduce the possibility of the clothing burning when in occasional and brief contact with small flames and thereby constituting a hazard. Additional requirements for clothing are also specified, including design requirements, mechanical requirements, marking, instructions and information supplied by the manufacturer.

When protection against heat hazards is necessary, in addition to protection against flame, this document is not applicable International Standards such as ISO 11612^[2] are used instead.

A classification system is given for materials, material assemblies, and garments which are tested according to ISO 15025:2016, Procedure A.

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.

ISO 3759, *Textiles — Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change*

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

ISO 9073-4, *Nonwovens — Test methods — Part 4: Determination of tear resistance by the trapezoid procedure*

ISO 13688, *Protective clothing — General requirements*

ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method*

ISO 13935-2, *Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 2: Determination of maximum force to seam rupture using the grab method*

ISO 13937-2, *Textiles — Tear properties of fabrics — Part 2: Determination of tear force of trouser-shaped test specimens (Single tear method)*

ISO 13938-1, *Textiles — Bursting properties of fabrics — Part 1: Hydraulic method for determination of bursting strength and bursting distension*

ISO 13938-2, *Textiles — Bursting properties of fabrics — Part 2: Pneumatic method for determination of bursting strength and bursting distension*

ISO 15025:2016, *Protective clothing — Protection against flame — Method of test for limited flame spread*

3 Terms and definitions

For the purposes of this document, the terms and definitions apply.