

BS 7971-10:2014

Incorporating Corrigendum No.1



BSI Standards Publication

Protective clothing and equipment for use in violent situations and in training

**Part 10: Coveralls – Requirements
and test methods**

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Summary of pages

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Foreword

Publishing information

This part of BS 7971 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 28 February 2014. It was prepared by Subcommittee PH/3/12, *Protective clothing and equipment for use in violent situations and training* under the authority of Technical Committee PH/3, *Protective clothing*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 7971-10:2004, which is withdrawn.

Information about this document

Text introduced or altered by Corrigendum No.1 is indicated in the text by tags **[C1]** **[C1]**. Minor editorial corrections are not tagged.

This British Standard has been substantially revised in association with the Home Office. The aims of the revision were to amalgamate appropriate content from BS 7971-1, BS 7971-2 and BS 7971-10, together with content from the Home Office publication, *Flame retardant overalls standard for UK police (2008)* [1]. This British Standard contains public sector information licensed under the Open Government Licence v2.0.

This is a full revision of the standard and introduces requirements covering:

- innocuousness;
- sizing;
- pre-treatment processes;
- marking;
- user information;
- cleaning;
- modified resistance to chemicals;
- repeated resistance to heat transmission on exposure to flame;
- testing for flame spread after exposure to chemicals.

Ergonomics is not included. Annex A explains the rationale for this decision.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Attention is drawn to the following Directive:

- Personal Protective Equipment Directive (PPE), 89/686/EEC (as amended) [2].

Introduction

Coveralls are used in specialist operational situations and in training to reduce the risk of injury to the user, who might be faced with threats such as heat, flame and the effects of certain liquids, which in some circumstances could also be burning liquids.

Coveralls are intended to provide protection for a limited period only. They cover the whole body, excluding the head, hands and feet. A coverall is intended to be worn externally to other protective items, such as blunt trauma protectors and body armour, base layer garments and duty clothing.

In the period of time since the first publication of the BS 7971 suite of standards, products in general use have evolved to reflect the changing threat and operational needs of the user. The Home Office publication, *Flame retardant overalls standard for UK police (2008)* [1], introduced additional testing methodology including the need for protection from more penetrative chemical threats and repeated heat exposure. In the selection of coveralls, optimum protection has to be balanced with operational requirements in an environment where the option of increasing protection levels as a threat escalates might not be viable.

Operational requirements were taken into account during the preparation of this revision, including an option for protection to be achieved by use of combined undergarment and outer layer systems, which has been included from the Home Office standard.

NOTE As an aid to specifiers purchasing undergarments which do not fall into the definition of "functional undergarment" in accordance with this standard, guidance on suitable material and reference standards is given in Annex B.

Principal changes between this and the previous edition are outlined in the Foreword.

1 Scope

This British Standard specifies requirements and test methods for coveralls, which are to be used predominantly but not exclusively by police and prison officers in specialist operational situations and in training, and which are intended to provide protection against heat and flame and small volumes of certain liquids.

It is applicable to single and two-piece garments, single-layer garments, multi-layer garments and garment assemblies requiring use of a specific undergarment.

This British Standard does not cover other protective features such as electrostatic, cut or slash resistance.

NOTE Civilian groups working alongside police or prison services in specialist operational situations might find by risk assessment that this standard offers additional protection for such activities and threats not considered by other standards.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 530:2010, *Abrasion resistance of protective clothing material – Test methods*