## INTERNATIONAL STANDARD

ISO 16073-3

First edition 2019-10

# Wildland firefighting personal protective equipment — Requirements and test methods —

### Part 3: **Clothing**

Équipement de protection individuelle pour la lutte contre les feux d'espaces naturels — Exigences et méthodes d'essai —

Partie 3: Vêtements



### ISO 16073-3:2019(E)



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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 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>).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective equipment*, Subcommittee SC 14, *Firefighters personal equipment*.

This first edition of ISO 16073-3, together with ISO 16073-1, ISO 16073-2 and ISO 16073-4 to ISO 16073-8, cancels and replaces (ISO 16073:2011). The main changes are as follows:

The main changes compared to the previous edition are as follows:

- the content has been reviewed and separated into several parts;
- the respiratory protection has been deleted from the document.

A list of all parts in the ISO 16073 series can be found on the ISO website.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Introduction

Wildland firefighting involves work primarily in summer temperatures, for many hours in which the firefighter may develop high levels of metabolic heat. Loose-fitting clothing is as important as the fire resistance of materials in preventing serious burn injury. Clothing that is tight-fitting poses a danger to the wildland firefighter from radiant heat and heat stress, while, at the same time, diminishing the firefighter's ability to perform. Consequently, the protective clothing should be light, flexible and commensurate with the risks to which the firefighter may be exposed in order to be effective without introducing heat stress to the wearer.

Accordingly, a risk assessment (see ISO 21808) should be undertaken to determine if the clothing covered by this document is suitable for its intended use and the expected exposure. This document does not cover clothing for use in higher risk situations, where clothing complying with ISO 11999-3 (structural firefighting) or even ISO 15538 (firefighting with reflective outer surface), is more suitable, nor does this document cover clothing to protect against chemical, biological, electrical or radiation hazards. This document does not cover risk related to rescue operations that are covered in ISO 18639-3.

The risk assessment should include what additional personal protective equipment is necessary for the head, hand and feet. In some situations, respiratory protection may also be required.

Firefighters should be trained in the use, care and maintenance of the protective clothing covered by this document, including an understanding of its limitation.

The purpose of this document is to provide minimum performance requirements for protective clothing designed for use for extended periods during wildland firefighting activities. The minimum performance requirements and methods of test for personal protective equipment (PPE) covering the head, hands, feet, eyes and ears for wildland firefighting are covered in other parts of ISO 16073.

### Wildland firefighting personal protective equipment — Requirements and test methods —

### Part 3: **Clothing**

### 1 Scope

This document specifies test methods and minimum performance requirements for personal protective clothing, designed to protect the wearer's body, except for the head, hands, and feet, that is worn during wildland firefighting and associated activities. This clothing is not intended to provide protection during fire entrapment. This document covers the general design of the garment, the minimum level of performance for the materials employed and the methods of test to determine these levels.

This document is not applicable to clothing for use in situations encountered in structural firefighting (ISO 11999-3), rescue (ISO 18639-3) or where a high level of infrared radiation is expected (ISO 15538), nor does this document cover clothing to protect against chemical, biological, electrical or radiation hazards. This document does not provide protection against high mechanical risks such as for protection when using chain saws.

NOTE For information on test methods, minimum performance requirements and general design refer to ISO 15384.

#### 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 15384, Protective clothing for firefighters — Laboratory test methods and performance requirements for wildland firefighting clothing

ISO 16073-2, Wildland firefighting personal protective equipment — Requirements and test methods — Part 2: Compatibility

ISO/TR 19591, Personal protective equipment for firefighters — Standard terms and definitions

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO/TR 19591 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

### 4 Clothing

**4.1** The clothing shall comply with the test methods and minimum performance requirements given in ISO 15384.