INTERNATIONAL STANDARD

ISO 16073-2

First edition
2019-11

Wildland firefighting personal protective equipment — Requirements and test methods —

Part 2: Compatibility

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

Partie 2: Compatibilité

Reference number
ISO 16073-2:2019(E)

© ISO 2019



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Compatibility **1**
4.1 General 1
4.2 Minimum requirements of compatibility 2
4.3 Fit and function tests demonstrating compatibility 2
4.4 Test subjects 2
4.5 Test conditions 2
4.6 Test reports 2
Bibliography **3**

© ISO 2019 – All rights reserved

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 www.iso.org/directives).

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 www.iso.org/patents).

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 www.iso.org/iso/foreword.html.

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 16073-2, together with ISO 16073-1 and ISO 16073-3 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 www.iso.org/members.html.

© ISO 2019 – All rights reserved

Introduction

Wildland firefighting involves work carried out mostly in summer temperatures and for many hours, during which the firefighter can develop high levels of metabolic heat. As a consequence, the personal protective equipment (PPE) is required to be light, flexible and commensurate with the risks to which the firefighter can be exposed in order to be effective without introducing excessive heat stress to the wearer.

This document specifies design and performance requirements for the compatibility of ISO 16073-3, ISO 16073-4, ISO 16073-5, ISO 16073-6, ISO 16073-7, ISO 16073-8 and ISO 16073-9 when items covered by these documents are worn together. All the items should meet the general requirements for marking and manufacturer's instructions (ISO 16073-1), as well as specific marking and manufacturers instruction of the respective parts of ISO 16073.

Firefighters should be trained in the selection, use, care and maintenance of the PPE covered by this document, including an understanding of its limitations.

It is intended that a risk assessment be undertaken to determine if the PPE covered by this document is suitable for its intended use and the expected exposure.

This document provides minimum performance requirements for compatibility of wildland firefighters' personal protective equipment (PPE) designed for use for extended periods during wildland firefighting.

© ISO 2019 – All rights reserved

Wildland firefighting personal protective equipment — Requirements and test methods —

Part 2: Compatibility

1 Scope

This document specifies the minimum performance requirements and test methods for assessing compatibility of wildland firefighters' personal protective equipment (PPE).

This document does not cover PPE for structural firefighting (see ISO 11999 series), for use against chemical, biological, radiological and nuclear hazards, or for use where a reflective outer surface is required (see ISO 15538).

Activities in support of wildland firefighting, such as the cutting of trees and the use of a chainsaw can require additional compatibility testing to that provided in this document. Users are directed to those relevant standards for the requirements associated with such protection.

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/TS 11999-2, *PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures — Part 2: Compatibility*

ISO 16073-1, *Wildland firefighting personal protective equipment — Requirements and test methods— Part 1: General*

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:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

4 Compatibility

4.1 General

Compatibility becomes an issue when different items of PPE that make up an ensemble or combination are worn at the same time. This is because different types of PPE may interfere with another type of PPE leading to a reduction in the level of protection provided and/or restrictions in the way it can be worn.

© ISO 2019 – All rights reserved