ISO/FDIS 11999-4:2024(en)

ISO/TC94/SC14/WG2TC 94/SC 14

Secretariat: SA

Date: 2024-04-15xx

PPE for Firefightersfirefighters — 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 4: Gloves

Part 4: Gloves

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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 protection — Protective clothing and equipment*, Subcommittee SC 14, *Firefighters' personal equipment*.

This second edition cancels and replaces the first edition (ISO 11999-4:2015), which has been technically revised.

The main changes are as follows:

— editorial changes throughout the document.

A list of all parts in the ISO 11999 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~~www.iso.org/members.html.

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PPE for ~~Firefighters~~firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and ~~to~~/or flame while fighting fires occurring in structures —

Part 4: Gloves

1 Scope

This document specifies minimum design and performance requirements for gloves as part of personal protective equipment (PPE) to be used by firefighters, primarily, but not solely, to protect against exposure to flame and high thermal loads.

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.

~~<std>ISO 811, *Textiles — Determination of resistance to water penetration — Hydrostatic pressure test*</std>~~

<std>ISO 811, *Textiles — Determination of resistance to water penetration — Hydrostatic pressure test*

ISO 3146, Plastics — Determination of melting behaviour (melting temperature or melting range) of semi-crystalline polymers by capillary tube and polarizing-microscope methods~~</std>~~

~~<std>ISO 3175~~ ISO 3175-1, Textiles — Professional care, drycleaning and wetcleaning of fabrics and garments — Part 1: Assessment of performance after cleaning and finishing~~</std>~~

~~<std>ISO 6330, *Textiles — Domestic washing and drying procedures for textile testing*</std>~~

<std>ISO 6330, *Textiles — Domestic washing and drying procedures for textile testing*

ISO 6942, Protective clothing — Protection against heat and fire — Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat~~</std>~~

~~<std>ISO 9151, *Protective clothing against heat and flame — Determination of heat transmission on exposure to flame*</std>~~

~~<std>ISO 11999~~ ISO 9151, *Protective clothing against heat and flame — Determination of heat transmission on exposure to flame*

ISO 11999-1, 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 1: General~~</std>~~

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<std>ISO 11999-ISO 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</std>

<std>ISO 12127-ISO 12127-1, Clothing for protection against heat and flame — Determination of contact heat transmission through protective clothing or constituent materials — Part 1: Contact heat produced by heating cylinder</std>

<std>ISO 12947-ISO 12947-4, Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 4: Assessment of appearance change</std>

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

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

<std>ISO 13994, Clothing for protection against liquid chemicals — Determination of the resistance of protective clothing materials to penetration by liquids under pressure</std>

<std>ISO 13996, *Protective clothing — Mechanical properties — Determination of resistance to puncture*</std>

<std>ISO 13997, *Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects*</std>

<std>ISO 15025, *Protective clothing — Protection against flame — Method of test for limited flame spread*</std>

<std>ISO 13996, *Protective clothing — Mechanical properties — Determination of resistance to puncture*

ISO 13997, *Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects*

ISO 15025, *Protective clothing — Protection against flame — Method of test for limited flame spread*</std>

ISO 16604, Clothing for protection against contact with blood and body fluids — Determination of resistance of protective clothing materials to penetration by blood-borne pathogens — Test method using Phi-X 174 bacteriophage</std>

<std>ISO 17075-1, *Leather — Chemical determination of chromium(VI) content in leather — Part 1: Colorimetric method*</std>

<std>ISO 17075-2, *Leather — Chemical determination of chromium(VI) content in leather — Part 2: Chromatographic method*</std>

<std>ISO 17493:2016, Clothing and equipment for protection against heat — Test method for convective heat resistance using a hot air circulating oven</std>

<std>ISO 21420, *Protective gloves — General requirements and test methods*</std>

<std>ISO 23388, *Protective gloves against mechanical risks*</std>

<std>EN 13087-1:2000, *Protective helmets — Test methods — Conditions and conditioning*</std>

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