

International Standard

ISO 374-5

Protective gloves against dangerous chemicals and micro-organisms —

Part 5:

Terminology and performance darks requirements for microorganisms risks

Gants de protection contre les produits chimiques dangereux et les micro-organismes —

Partie 5: Terminologie et exigences de performance pour les risques par les micro-organismes

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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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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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* — *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 arm protection and lifejackets*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 374-5:2016), which has been technically revised. Standards Stein and Catalog/Standards/ISO/ICd933ef-93 II-46a5-9032-6ad I7b2a084d/ISO-374-5-2024

The main changes are as follows:

- reference to ISO 21420:2020+Amd 1:2022 has been added;
- new possible marking has been added, see <u>Clause 6</u>.
- a new subclause, <u>5.2</u> Dexterity, has been added;
- <u>Table 1</u> has been updated;
- in <u>Clause 7</u>, clarification for single use gloves has been given.

A list of all parts in the ISO 374 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.

Protective gloves against dangerous chemicals and microorganisms —

Part 5:

Terminology and performance requirements for microorganisms risks

1 Scope

This document specifies the requirements and test methods for protective gloves intended to protect the user against micro-organisms.

NOTE If other protection features are needed, e.g. chemical risks, mechanical risks, thermal risks, electrostatic dissipation etc., the appropriate specific performance standard is used in addition. Further information on protective gloves standards can be found in the ISO 21420:2020+Amd 1:2022

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 374-2:2019, Protective gloves against dangerous chemicals and micro-organisms — Part 2: Determination of resistance to penetration

ISO 7000:2019, Graphical symbols for use on equipment — Registered symbols

ISO 16604:2004, 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

ISO 21420:2020+Amd1:2022, Protective gloves — General requirements and test methods

3 Terms and definitions

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

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

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1

bacteria

very large group of micro-organisms comprising one of the three domains of living organisms, they are prokaryotic, unicellular, and either free-living in soil or water or parasites of plants or animals

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3.2

protective gloves against micro-organisms

protective gloves which form a protective barrier to microbiological agents

Note 1 to entry: Microbiological agents are bacteria or viruses or fungi.

3.3

viruses

any of various simple sub-microscopic parasites of plants, animals, and *bacteria* (3.1) that often cause disease and that consist essentially of a core of RNA or DNA surrounded by a protein coat

Note 1 to entry: Unable to replicate without a host cell, viruses are typically not considered living organisms.

3.4

fungi

any of numerous eukaryotic organisms of the kingdom Fungi, which lack chlorophyll and vascular tissue and range in form from a single cell to a body mass of branched filamentous hyphae that often produce specialized fruiting bodies

Note 1 to entry: The kingdom includes the yeasts, moulds and smuts.

4 Sampling

4.1 Sampling for viral penetration testing

The test specimen shall be taken from the palm area. If the glove is longer than or equal to 400 mm and if the cuff is claimed to protect against micro-organism risks, additional test specimens shall be taken where the centre is approximately at 80 mm from the end of the cuff (see <u>Figure 1</u>). For further instructions, see ISO 16604:2004, Clause 7.

In the case of seams in the hand area, this area shall be tested.

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