

AS/NZS 2161.10.1:2024
ISO 374-1:2024



Australian/New Zealand Standard™

Occupational protective gloves

Part 10.1: Protective gloves against dangerous chemicals and micro-organisms — Terminology and performance requirements for chemical risks (ISO 374-1:2024, IDT)



AS/NZS 2161.10.1:2024

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risks (ISO 374-1:2024, IDT)**

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-053, Personal Protective Equipment and Clothing, to supersede AS/NZS 2161.10.1:2005.

The objective of this document is to specify the requirements for protective gloves intended to protect the user against dangerous chemicals and defines terms to be used.

This document is identical with, and has been reproduced from, ISO 374-1, *Protective gloves against dangerous chemicals and microorganisms — Part 1: Terminology and performance requirements for chemical risks*.

As this document has been reproduced from an international document, a full point substitutes for a comma when referring to a decimal marker.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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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 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 on 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 the following URL: 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 and 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 374-1:2016), which has been technically revised. It also incorporates the Amendment ISO 374-1:2016/Amd 1:2018.

The main changes are as follows:

- reference to new standard ISO 21420:2020 + Amd 1:2022;
- new requirement for penetration;
- new [Figure 2](#) change in [Figures 4, 5, 6](#);
- new expression of permeation results [5.4.1.2](#);
- new [Annex A](#) with reference to ISO 6529;

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.

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1 Scope

This document specifies the requirements for protective gloves intended to protect the user against dangerous chemicals and defines terms to be used.

NOTE If other protection features are covered, e.g., mechanical risks, thermal risks, electrical static dissipation etc., the appropriate specific performance standard is used in addition. Further information on protective gloves standards can be found in the ISO 21420.

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 374-4:2019, *Protective gloves against dangerous chemicals and micro-organisms — Part 4: Determination of resistance to degradation by chemicals*

ISO 6529:2013, *Protective clothing — Protection against chemicals — Determination of resistance of protective clothing materials to permeation by liquids and gases*

ISO 21420:2020, *Protective gloves — General requirements and test methods*

ISO 21420:2020/Amd 1:2022, *Protective gloves — General requirements and test methods — Amendment 1*

EN 16523-1:2015+Amd 1:2018, *Determination of material resistance to permeation by chemicals — Part 1: Permeation by liquid chemical under conditions of continuous contact*

3 Terms and definitions

For the purposes of this document, the terms and definitions in EN 16523-1:2015+Amd 1:2018 and the following 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

dangerous chemicals

chemical substance potentially hazardous for the health (carcinogenic, mutagenic, reprotoxic, toxic, harmful, corrosive, irritant, sensitizing), as defined in any national regulation