AS/NZS 2161.10.2:2025
ISO 374-2:2019

STANDARDS NEW ZEALAND
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Australian/New Zealand Standard™

Occupational protective gloves

Part 10.2: Protective gloves against dangerous chemicals and micro-organisms — Determination of resistance to penetration (ISO 374-2:2019, IDT)

AS/NZS 2161.10.2:2025

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee SF-053, Personal Protective Equipment and Clothing. It was approved on behalf of Standards Australia's Standards Development and Accreditation Committee on 26 February 2025 and by the New Zealand Standards Approval Board on 05 March 2025.

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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 2161.10.2:2005, *Occupational protective gloves, Part 10.2: Protective gloves against chemicals and micro-organisms — Determination of resistance to penetration*.

The objective of this document is to specify a test method for the penetration resistance of gloves that protect against dangerous chemicals and/or microorganisms.

This document is identical with, and has been reproduced from, ISO 374-2:2019, *Protective gloves against dangerous chemicals and micro-organisms — Part 2: Determination of resistance to penetration*.

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

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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.

Contents

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 clothing and equipment*, Subcommittee SC 13, *Protective clothing*.

This document has been transferred from EN 374-2 without technical changes.

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.

Australian/New Zealand Standard

Occupational protective gloves

Part 10.2: Protective gloves against dangerous chemicals and micro-organisms — Determination of resistance to penetration (ISO 374-2:2019, IDT)

1 Scope

This document specifies a test method for the penetration resistance of gloves that protect against dangerous chemicals and/or micro-organisms.

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 374-1, *Protective gloves against dangerous chemicals and micro-organisms — Part 1: Terminology and performance requirements for chemical risks*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 374-1 apply.

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

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

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

4 Test principles

4.1 Air leak test

A glove is immersed in water and its interior is pressurised with air. A leak is detected by a stream of air bubbles from the surface of the glove.

4.2 Water leak test

A glove is filled with water. A leak is detected by the appearance of water droplets on the outside of the glove.

4.3 Remarks

The air leak procedure is not suitable for all gloves. For example, parts of some gloves can be overinflated while other parts of the same gloves can only be partially inflated. If the air leak test proves unsuitable, then only the water penetration test is carried out.

For both methods disregard leaks within the area of 40 mm from the edge of the liquid proof area.

5 Sampling

For the purpose of testing, the test sample will be one glove of each size, with an overall minimum of 4 samples per performed test.