

Australian/New Zealand Standard™

## Occupational protective gloves

### Part 10.1: Protective gloves against chemicals and micro-organisms— Terminology and performance requirements

## **AS/NZS 2161.10.1:2005**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-023, Occupational Protective Gloves. It was approved on behalf of the Council of Standards Australia on 9 March 2005 and on behalf of the Council of Standards New Zealand on 18 March 2005.

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Department of Consumer & Employment Protection, Worksafe Division (WA)  
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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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**RECONFIRMATION**

**OF**

**AS/NZS 2161.10.1:2005**

**Occupational protective gloves**

**Part 10.1: Protective gloves against chemicals and micro-organisms—Terminology  
and performance requirements**

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Technical Committee SF-023 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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## NOTES

# Australian/New Zealand Standard™

## Occupational protective gloves

### Part 10.1: Protective gloves against chemicals and micro-organisms— Terminology and performance requirements

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-023, Occupational Protective Gloves, to supersede AS/NZS 2161.10.1:2002.

The objective of this Standard is to provide users and manufacturers with a common terminology and a set of performance requirements for gloves intended to be used against chemicals and biological contaminants. The objective of this revision is to adopt the current edition of EN 374-1.

This Standard is identical with and has been reproduced from the European (CEN) Standard EN 374-1:2003, *Protective gloves against chemicals and micro-organisms, Part 1: Terminology and performance requirements*.

Guidance for the selection, care and use of occupational protective gloves is not covered by this Standard but is provided in AS/NZS 2161.1, *Occupational protective gloves, Part 1: Selection, use and maintenance*.

The Committee noted that there was no advice on the effect of different cells on chemical permeation result or advice on mixtures of chemicals and commonly-occurring pesticides may affect results. Such advice is intended to be included in the next version of AS/NZS 2161.1.

As this Standard is reproduced from a European Standard, the following applies:

- (a) Its number appears on the cover and title page while the European Standard number appears only on the cover
- (b) In the source text ‘this European Standard’ should read ‘this Australian/New Zealand Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

References to international Standards should be replaced by equivalent Australian, New Zealand or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard or other publication</i>	<i>Joint Australian/New Zealand Standard</i>
ISO	AS/NZS
374 Protective gloves against chemicals and micro-organisms	2161 Occupational protective gloves
374-2 Part 2: Determination of resistance to penetration	2161.10.2 Part 10.2: Protective gloves against chemicals and micro-organisms—Determination of resistance to penetration
374-3 Part 3: Determination of resistance to permeation by chemicals	2161.10.3 Part 10.3: Protective gloves against chemicals and micro-organisms—Determination of resistance to permeation by chemicals
388 Protective gloves against mechanical risk	2161.3 Part 3: Protection against mechanical risks
EN	
420 General requirements for gloves	2161.2 Part 2: General requirements

This Standard is Part 10.1 of the following series:

AS/NZS

2161 Occupational protective gloves

2161.10.1 Part 10.1: Protective gloves against chemicals and micro-organisms—Terminology and performance requirements

2161.10.2 Part 10.2: Protective gloves against chemicals and micro-organisms—Determination of resistance to penetration

2161.10.3 Part 10.3: Protective gloves against chemicals and micro-organisms—Determination of resistance to permeation by chemicals

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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## AUSTRALIAN/NEW ZEALAND STANDARD

**Occupational protective gloves****Part 10.1:****Protective gloves against chemicals and micro-organisms—Terminology and performance requirements****1 Scope**

This standard specifies the requirements for gloves to protect the user against chemicals and/or micro-organisms and defines terms to be used.

This standard should be used in conjunction with EN 420.

This standard does not specify requirements for protection against any mechanical hazards.

**2 Normative references**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

EN 374-2, *Protective gloves against chemicals and micro-organisms — Part 2: Determination of resistance to penetration.*

EN 374-3, *Protective gloves against chemicals and micro-organisms — Part 3: Determination of resistance to permeation by chemicals.*

EN 388, *Protective gloves against mechanical risks.*

EN 420, *General requirements for gloves.*

**3 Terms and definitions**

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

**3.1****protective glove material**

any material or combination of materials used in a glove for the purpose of isolating the hands or hands and arms from direct contact with a chemical and/or micro-organism

**3.2****protective gloves against micro-organisms**

at this time it is believed that gloves which resist penetration, when tested according to 5.2, form an effective barrier to bacteria and fungi. This assumption does not apply to protection against viruses.

**3.3****degradation**

deleterious change in one or more properties of a protective glove material due to contact with a chemical. These changes include flaking, swelling, disintegration, embrittlement, discolouration, dimensions, appearance, hardening, softening, etc

**3.4****penetration**

movement of a chemical and/or micro-organism through porous materials, seams, pinholes, or other imperfections in a protective glove material on a non-molecular level

**3.5****permeation**

process by which a chemical moves through a protective glove material on a molecular level. Permeation involves the following: