

AS/NZS 2161.2:2005

EN 420:2003

Reconfirmed 2016

AS/NZS 2161.2:2005

Australian/New Zealand Standard™

Occupational protective gloves

Part 2: General requirements



AS/NZS 2161.2:2005

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 4 April 2005 and on behalf of the Council of Standards New Zealand on 15 April 2005.

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The following are represented on Committee SF-023:

Association of Accredited Certification Bodies
Australasian Fire Authorities Council
Australian Chamber of Commerce and Industry
Department of Consumer & Employment Protection, Worksafe Division (WA)
Griffith University
Telstra Corporation Limited
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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION
OF
AS/NZS 2161.2:2005
Occupational protective gloves
Part 2: General requirements

RECONFIRMATION NOTICE

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.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

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Griffith University
National Safety Council of Australia
Safety Institute of Australia
University of Otago New Zealand
Worksafe New Zealand

NOTES

Australian/New Zealand Standard™

Occupational protective gloves

Part 2: General 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 2161.2:1998. It is identical with and has been reproduced from EN 420:2003, *Protective gloves—General requirements and test methods*.

The objective of this Standard is to provide users and manufacturers with a set of general requirements for gloves intended to be used to provide protection against various workplace hazards. The objective of this revision is to adopt the current edition of EN 420.

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 or European Standards should be replaced by Joint Australian/New Zealand Standards, as follows:

Reference to International Standard or other publication *Joint Australian/New Zealand Standard*

EN		AS/NZS	
374	Protective gloves against chemicals and micro-organisms	2161 2161.10	Occupational protective gloves Protective gloves against chemicals and micro-organisms
374-1	Part 1: Terminology and performance requirements	2161.10.1	Part 10.1: Terminology and performance requirements
374-2	Part 2: Determination of resistance to penetration	2161.10.2	Part 10.2: Determination of resistance to penetration
374-3	Part 3: Determination of resistance to permeation by chemicals	2161.10.3	Part 10.3: Determination of resistance to permeation by chemicals
388	Protective gloves against mechanical risks	2161 2161.3	Occupational protective gloves Part 3: Protection against mechanical risks
407	Protective gloves against thermal hazards (heat and/or fire)	2161.4	Part 4: Protection against thermal risks (heat and fire)
421	Protective gloves against ionizing radiation and radioactive contamination	2161.8	Part 8: Protection against ionizing radiation and radioactive contamination
511	Protective gloves against cold	2161.5	Part 5: Protection against cold
659	Protective glove for firefighters	2161.6	Part 6: Protective gloves for firefighters—Laboratory test methods and performance requirements

EN		AS/NZS	
1082	Protective clothing—Gloves and arm guards protecting against cuts and stabs by hand knives	2161 2161.7	Occupational protective gloves Protection against cuts and stabs by hand knives
1082-1	Part 1: Chain mail gloves and arms guards	2161.7.1	Part 7.1 Chainmail gloves and arm guards
1082-2	Part 2: Gloves and arms guards made of material other than chain mail	2161.7.2	Part 7.2: Gloves and arm guards made of material other than chainmail.
1082-3	Part 3: Impact cut test for fabric, leather and other materials	2161.7.3	Part 7.3: Impact cut test for fabric, leather and other materials
10819	Mechanical vibration and shock—Hand-arm vibration—Method for the measurement and evaluation of the vibration transmissibility of gloves at the palm of the hand (ISO 10819:1996)	2161.9	Part 9: Method of measurement and evaluation of the vibration transmissibility of gloves at the palm of the hand

NOTE: Any international Standards not listed have not been adopted as Australian or Australian/New Zealand Standards.

Guidance for the selection, care and use of occupational protective gloves is given in a separate Standard in the series.

In the course of considering adoption of this Standard, Committee SF-023 agreed that the reader's attention should be drawn to the following points:

- (i) The issue of estimating and recording uncertainty in measurement is not addressed in this Standard. Users are encouraged to refer to '*Guide to the Expression of Uncertainty in Measurement*' issued by BIPM, IEC, IFCC, ISO, IUPAC, IUPAP and OIML.
- (ii) The test temperature may not reflect conditions of end use, and so the actual performance of the glove in the workplace may differ from results obtained following this Standard.
- (iii) Although the Standard allows for gloves to be reused, the actual conditions of use may affect the gloves' performance, particularly when they are exposed to certain chemicals.

Despite testing before and after the 'maximum recommended number of cleaning cycles' (see Clause 4.4) actual performance can be markedly reduced after exposure to certain workplace conditions.

- (iv) Specification of a minimum length of glove is inadequate for the purpose of specifying good fit. Glove size will vary considerably with style and material. Such gloves do not reflect hand sizes of the working population and the use of incorrectly sized gloves is an unsafe practice. Users may need to order gloves outside the range of size specified in this Standard.

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

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AUSTRALIAN/NEW ZEALAND STANDARD

Occupational protective gloves

Part 2: General requirements

Introduction

This European Standard is a reference standard to be called up as appropriate by the specific European Standards relevant or applicable to protective gloves.

This standard should not be used alone, but only in combination with the appropriate specific standard.

1 Scope

This standard defines the general requirements and relevant test procedures for glove design and construction, resistance of glove materials to water penetration, innocuousness, comfort and efficiency, marking and information supplied by the manufacturer applicable to all protective gloves.

NOTE It can also be applicable to arm protectors and gloves permanently incorporated in containment enclosures.

This European Standard does not address the protective properties of gloves and therefore should not be used alone but only in combination with the appropriate specific European Standard(s).

A non exhaustive list of these standards is given in the Bibliography.

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 344-1:1992, *Safety, protective and occupational footwear for professional use — Part 1: Requirements and test methods.*

EN 374-1:2003, *Protective gloves against chemicals and micro-organisms — Part 1: Terminology and performance requirements.*

EN 407, *Protective gloves against thermal risks (heat and/or fire).*

EN 455-3, *Medical gloves for single use — Part 3 : Requirements and testing for biological evaluation.*

EN 1149-1, *Protective clothing — Electrostatic properties — Part 1: Surface resistivity (Test methods and requirements).*

EN 1149-2, *Protective clothing - Electrostatic properties — Part 2: Test method for measurement of the electrical resistance through a material (vertical resistance).*

prEN 1149-3, *Protective clothing — Electrostatic properties — Part 3: Test methods for measurement of charge decay.*

EN 1413, *Textiles — Determination of pH of aqueous extract.*