

Australian/New Zealand Standard™

Occupational protective gloves

Part 1: Selection, use and maintenance



AS/NZS 2161.1:2016

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The following are represented on Committee SF-023:

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This Standard was issued in draft form for comment as DR AS/NZS 2161.1:2015.

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PREFACE

This Standard was prepared by the Joint Australia/New Zealand Standards Committee SF-023, Occupational Protective Gloves, to supersede AS/NZS 2161.1:2000.

The objective of this revision was to include a new appendix explaining conformity assessment issues relating to the selection and purchase of gloves, as well as updating text to reflect current practices and terminology.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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Occupational protective gloves

Part 1: Selection, use and maintenance

1 SCOPE

This Standard sets out recommendations to achieve hand protection against hazards experienced in the workplace. It gives guidance on the following:

- (a) *Selection* Aspects to be taken into account when determining the type of glove appropriate to the particular usage and the envisaged hazards as well as disposal of the gloves.
- (b) *Use* Practices to be followed for the different types of gloves.
- (c) *Maintenance* Safe and hygienic practices to be followed in the decontamination/cleaning, storage and reissue of gloves to maintain the performance as appropriate.

The Standard does not include requirements for the performance or testing of gloves, as these are specified separately in other parts of the AS/NZS 2161 series, AS 2225, AS/NZS 4011.1, AS/NZS 4011.2 and AS/NZS 4179 as appropriate.

2 OBJECTIVE

The objective of this Standard is to enable users of protective gloves to select gloves suitable for their work and to use and maintain them in a manner that ensures the glove's function is not compromised.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2225 Insulating gloves for electrical purposes

AS/NZS

2161 Occupational protective gloves

2161.2 Part 2: General requirements

2161.3 Part 3: Protection against mechanical risks

2161.4 Part 4: Protection against thermal risks (heat and fire)

2161.5 Part 5: Protection against cold

2161.7.1 Part 7.1: Protection against cuts and stabs by hand knives—Chainmail gloves and arm guards

2161.7.2 Part 7.2: Protection against cuts and stabs by hand knives—Gloves and arm guards made of material other than chainmail

2161.8 Part 8: Protection against ionizing radiation and radioactive contamination

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

AS/NZS

- 4011 Single-use medical examination gloves
 - 4011.1 Part 1: Specification for gloves made from rubber latex or rubber solution
 - 4011.2 Part 2: Specification for gloves made from poly(vinyl chloride)
 - 4179 Single-use sterile surgical rubber gloves—Specification (ISO 10282:2014, MOD)
 - 4804 Occupational health and safety management systems—General guidelines on principles, systems and supporting techniques
- EN
- 420 Protective gloves—General requirements and test methods
- ISO
- 16073 Wildland firefighting personal protective equipment—Requirements and test methods

4 DEFINITIONS

For the purposes of this Standard, the definitions below apply.

4.1 Absorption

The process by which one thing absorbs or is absorbed by another.

4.2 Adsorption

The adhesion of atoms, ions, or molecules from a gas, liquid, or dissolved solid to a surface.

4.3 Breakthrough time

The time elapsed between initial contact of a chemical with the outside surface of a glove material and the time at which the chemical can be detected at the inside surface of the material. Measured breakthrough times are dependent on the sensitivity of the analytical methods used to detect the chemical.

4.4 Decontamination

The effective removal of contaminants from the glove.

NOTE: Surface cleaning does not necessarily remove absorbed/adsorbed contaminants.

4.5 Degradation

A deleterious change in any physical and/or chemical property of a protective glove material.

4.6 Disposal

The final step of a waste management process.

4.7 Glove

An item of personal protective equipment intended to protect the hand or hand and arm against hazards. The term includes mittens and gauntlets.

4.8 Hazard

A source or situation with a potential for harm in terms of human injury or ill-health.

4.9 Hazard identification

The process of recognizing that a hazard exists and defining its characteristics.

4.10 Penetration

The movement of a substance and/or microorganism through porous materials, seams, pinholes, or other imperfections in a protective glove material on a non-molecular level.