
**Protective gloves — General
requirements and test methods**

Gants de protection — Exigences générales et méthodes d'essai

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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

ISO 21420 was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and 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).

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.

Introduction

This document is a reference standard to be referred to as appropriate by the specific standards relevant or applicable to protective gloves.

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Protective gloves — General requirements and test methods

1 Scope

This document specifies the general requirements and relevant test procedures for glove design and construction, innocuousness, comfort and efficiency, as well as the marking and information supplied by the manufacturer applicable to all protective gloves.

It can also apply to arm protectors and gloves permanently incorporated in containment enclosures.

Gloves and hand protectors such as mittens, pot holders and arm protection are covered by this document.

This document does not address the protective properties of gloves and therefore is not used alone but only in combination with the appropriate specific standard(s). A non-exhaustive list of these standards is given in the Bibliography.

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 3071, *Textiles — Determination of pH of aqueous extract*

ISO 3758, *Textiles — Care labelling code using symbols*

ISO 4045:2018, *Leather — Chemical tests — Determination of pH and difference figure*

ISO 7000:2014, *Graphical symbols for use on equipment — Registered symbols*

ISO 11092, *Textiles — Physiological effects — Measurement of thermal and water-vapour resistance under steady-state conditions (sweating guarded-hotplate test)*

ISO 14268, *Leather — Physical and mechanical tests — Determination of water vapour permeability*

ISO 14362-1, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres*

ISO/TS 16190, *Footwear — Critical substances potentially present in footwear and footwear components — Test method to quantitatively determine polycyclic aromatic hydrocarbons (PAH) in footwear materials*

ISO 17075-1, *Leather — Chemical determination of chromium(VI) content in leather — Part 1: Colorimetric method*

ISO 17075-2, *Leather — Chemical determination of chromium(VI) content in leather — Part 2: Chromatographic method*

ISO 17234-1, *Leather — Chemical tests for the determination of certain azo colorants in dyed leathers — Part 1: Determination of certain aromatic amines derived from azo colorants*

ISO 20344:2011, *Personal protective equipment — Test methods for footwear*

ISO 23388, *Protective gloves against mechanical risks*

EN 1811+A1:2015, *Reference test method for release of nickel from post assemblies which are inserted into pierced parts of the human body and articles intended to come into direct and prolonged contact with the skin*

EN 16350, *Protective gloves — Electrostatic properties*

EN 16778, *Protective gloves — Determination of dimethylformamide in gloves*

IEC 60417:2002, *Graphical symbols for use on equipment*

3 Terms and definitions

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

3.1

dexterity

manipulative ability to perform a task with the hands

3.2

glove

personal protective equipment (PPE) which protects the hand or part of the hand against hazards. It can additionally cover part of the forearm and arm

3.3

glove palm

part of the glove which covers the palm of the hand, i.e. from the wrist to the base of the fingers

3.4

glove back

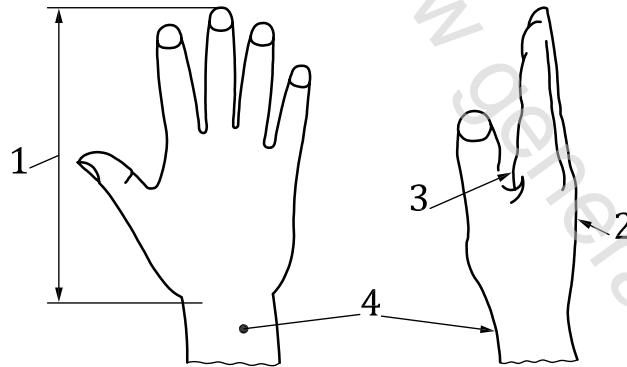
part of the glove which covers the back of the hand, i.e. from the wrist to the base of the fingers

3.5

hand

end part of the body beyond the wrist, including palm, fingers and the thumb

Note 1 to entry: See [Figure 1](#).



Key

1 hand
2 back

3 palm
4 wrist

Figure 1 — Definitions of hand, palm, back and wrist

3.6

hazard

potential source of injury or damage to the health of people