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English Version

## Hand protection - Guidance for selection and use (ISO/TR 8546:2022)

Protection de la main - Lignes directrices pour la  
sélection et l'utilisation (ISO/TR 8546:2022)

Handschutz - Leitfaden für Auswahl und Gebrauch  
(ISO/TR 8546:2022)

This Technical Report was approved by CEN on 7 July 2022. It has been drawn up by the Technical Committee CEN/TC 162.

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## European foreword

This document (CEN ISO/TR 8546:2022) has been prepared by Technical Committee ISO/TC 94 "Personal safety -- Personal protective equipment" in collaboration with Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets" the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

## Endorsement notice

The text of ISO/TR 8546:2022 has been approved by CEN as CEN ISO/TR 8546:2022 without any modification.

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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](http://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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — 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).

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## Introduction

For the past year a push has taken place to align EN and ISO standards. Currently some are covered by a single standard, others are identical, but not yet as an EN ISO standard, others have not been developed as ISO or CEN standard. The table below describes the state of the various standards.

EN Standard	ISO Standard	Future state
EN 420:2010	ISO 21420:2020	same
EN ISO 374-1:2016+A1:2018	ISO 374-1: 2016 + Amd 1:2018	same
EN ISO 374-2:2019	ISO 374-2:2019	Already equivalent, but single standard as EN ISO
EN ISO 374-4:2019	ISO 374-4:2019	Already equivalent, but single standard as EN ISO
EN ISO 374-5:2016	ISO 374-5:2016	same
EN ISO 374-6	ISO 374-6	joint project in preparation
EN 388:2016+A1:2018	ISO 23388:2018	Already equivalent, but single standard as EN ISO
EN 407:2020+A1:2021	ISO 23407:2021	Already equivalent, but single standard as EN ISO
No CEN equivalent	ISO 18889	EN ISO 18889 once adopted
EN ISO 19918	ISO 19918	same
EN 16523-1:2015 (liquid permeation) EN 16523-2:2015 (gas permeation) <i>Replaced EN 374-3</i>	not equivalent to ISO 6529 but many similarities	Revision of ISO 6529 will more closely align ISO with EN
EN 16530:2016 (electrostatic)	No ISO equivalent	TBD
EN 16778: 2016 (DMFA concentration)	No ISO equivalent	TBD
EN 12477:2001 + A1:2005 (welder)	No ISO equivalent	TBD
EN 511:2006	No ISO equivalent	TBD
EN 659:2003 +A1:2008	ISO 15383:2001 ISO 11999-4:2015	Revision of EN 659 will more closely align EN with ISO
No CEN equivalent	ISO 16073-4:2019	Revision of EN 659 will more closely align EN with ISO
No CEN equivalent	ISO 18639-4:2018	Revision of EN 659 will more closely align EN with ISO
		TBD to be decided

# Hand protection — Guidance for selection and use

## 1 Scope

This document gives information on the selection and use of personal protective equipment for the hand protection.

The application of this document requires that the risk assessment has been carried out and the hazards have been minimized accordingly through substitution and technical and organizational measures.

On this basis, this document contains information that supports employers in counteracting certain risks to hands that could not be sufficiently reduced by substitution and technical and organizational measures by selecting and using suitable protective gloves.

This document provides explanations on selection, usage and training applicable to protective gloves. The explanations concerning specific hazards are provided in annexes.

This guidance considers the following risks:

- mechanical, (see [Annex A](#));
- chemical, (see [Annex B](#));
- biological, (see [Annex C](#));
- thermal, (see [Annex D](#) and [E](#));
- electrostatic discharge (see [Annex F](#));
- ionizing radiation and radioactive contamination (see [Annex G](#)).

This guidance does not cover other risks, because pertinent international or national publications are available or because the relevant information was not available in ISO/TC 94/SC 13/WG 8. Risks not covered include e.g.:

- cuts and stabs by hand knives;
- use of chain saws (covered by ISO 11393-4:2018, Annex A);
- animal bites;
- needlesticks;
- electrocution;
- optical radiation;
- vibrations;
- electric fault arcs;
- firefighting (covered by ISO/TR 21808);
- sport.

## 2 Normative references

There are no normative references in this document.