STN	Chrániče očí a tváre na športové použitie Časť 1: Požiadavky na zjazdové lyžiarske a snowboardové okuliare (ISO 18527-1: 2021)	STN EN ISO 18527-1
		83 2453

Eye and face protection for sports use - Part 1: Requirements for downhill skiing and snowboarding goggles (ISO 18527-1:2021)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/22

Obsahuje: EN ISO 18527-1:2022, ISO 18527-1:2021

Oznámením tejto normy sa od 31.05.2025 ruší STN EN 174 (83 2453) z júla 2002

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 18527-1

May 2022

ICS 13.340.20; 97.220.20

Supersedes EN 174:2001

English Version

Eye and face protection for sports use - Part 1: Requirements for downhill skiing and snowboarding goggles (ISO 18527-1:2021)

Protection des yeux et du visage à usage sportif - Partie 1: Exigences relatives aux lunettes de ski alpin et de surf des neiges (ISO 18527-1:2021) Augen- und Gesichtsschutz für sportliche Anwendungen - Teil 1: Anforderungen an Abfahrtskiund Snowboardbrillen (ISO 18527-1:2021)

This European Standard was approved by CEN on 29 February 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	3
Annex ZA (informative) Relationship between this European Standard and the essential	
requirements of Regulation 2016/425 aimed to be covered	5

European foreword

This document (EN ISO 18527-1:2022) has been prepared by Technical Committee ISO/TC 94 "Personal safety -- Personal protective equipment" in collaboration with Technical Committee CEN/TC 85 "Eye protective equipment" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by May 2025.

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 supersedes EN 174:2001.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For the relationship with EU Directive(s) / Regulation(s) 2016/425 see informative Annex ZA, which is an integral part of this document.

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.

The following referenced documents are indispensable for the application of this document. For undated references, the latest edition of the referenced document (including any amendments) applies. For dated references, only the edition cited applies. However, for any use of this document 'within the meaning of Annex ZA, the user should always check that any referenced document has not been superseded and that its relevant contents can still be considered the generally acknowledged state-of-art.

When an IEC or ISO standard is referred to in the ISO standard text, this shall be understood as a normative reference to the corresponding EN standard, if available, and otherwise to the dated version of the ISO or IEC standard, as listed below.

NOTE The way in which these referenced documents are cited in normative requirements determines the extent (in whole or in part) to which they apply.

Undated normative	Clause(s) of the ISO	Equivalent dated standard	
references in the ISO standard	standard	EN	ISO or IEC
ISO 4007	Clause 2 & 3	EN ISO 4007:2018	ISO 4007:2018
ISO 8980-5	Clause 2 & 14.3	EN ISO 8980-5:2005	ISO 8980-5:2005
ISO 11664-2	Clause 2, 5.1, 5.6.4 & 5.6.5	EN ISO 11664-2:2011	ISO 11664-2:2007
ISO 18526-1	Clause 2	EN ISO 18526-1:2020	ISO 18526-1:2020
ISO 18526-2	Clause 2	EN ISO 18526-2:2020	ISO 18526-2:2020
ISO 18526-3	Clause 2	EN ISO 18526-3:2020	ISO 18526-3:2020
ISO 18526-4	Clause 2, 4.5 & 15.3	EN ISO 18526-4:2020	ISO 18526-4:2020
ISO 21987	Clause 2 & 7.5	EN ISO 21987:2017	ISO 21987:2017

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 18527-1:2021 has been approved by CEN as EN ISO 18527-1:2022 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the essential requirements of Regulation 2016/425 aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/571 to provide one voluntary means of conforming to requirements of Regulation 2016/425.

Once this standard is cited in the Official Journal of the European Union under that Regulation 2016/425 compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding [essential] requirements of that Regulation 2016/425 and associated EFTA regulations

Table ZA.1 — Correspondence between this European Standard and Annex II of Regulation 2016/425 OJEU reference

Essential Requirements of Regulation	Clause(s)/subclause(s) of this EN	Remarks/Notes
1.1.1 Ergonomics	4.1; 12	
1.1.2.1 Optimum level of protection	7; 9; 10 ; 11; 12; 13; 14	
1.1.2.2 Classes of protection appropriate to different levels of risk	5.2; 5.3	
1.2.1 Absence of risks and other 'inherent' nuisance factors	4.2; 4.4	
1.2.1.1 Suitable constituent materials	4.1	
1.2.1.2 Satisfactory surface condition of all PPE parts in contact with the user.	4.2; 4.5	
1.2.1.3 Maximum permissible user impediment	6; 7; 12	
1.3.1 Adaptation of PPE to user morphology	4.6	
1.3.2 Lightness and design strength	8; 9; 10	
1.3.3 Compatibility of different classes or types of PPE designed for simultaneous use	4.6	
1.4 Manufacturer's instructions and information	15	

2.1 PPE incorporating adjustment systems	4.5	
2.3 PPE for the face, eyes and respiratory system	5.5; 6; 7; 14.2; 15.2	
2.9 PPE incorporating components which can be adjusted or removed by the use	4.2	
2.12 PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	15.2	
2.14 "Multi risk" PPE	5; 8; 9; 10; 11; 14.1	
3.7.1 PPE constituent materials and other components	14.1	
3.9.1 Non-ionising radiation	5.2, 5.3, 5.4; 15.2	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

INTERNATIONAL STANDARD

ISO 18527-1

First edition 2021-03

Eye and face protection for sports use —

Part 1:

Requirements for downhill skiing and snowboarding goggles

Protection des yeux et du visage à usage sportif —

Partie 1: Exigences relatives aux lunettes de ski alpin et de surf des neiges





COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Coı	Contents		Page
Fore	word		v
Intro	oductio	on	vi
1	Scop	De	1
2	Norr	mative references	1
3		ns and definitions	
4	4.1	eral requirements for gogglesPhysiological compatibility	
	4.2	Construction and adjustment	
	4.3	Cleaning and/or disinfection	
	4.4	Lens material and surface quality	
	4.5	Headform(s)	3
	4.6	Retention by headband and harnesses (sit and fit)	
	4.7	Mandatory and optional requirements	3
5	Tran	nsmittance of the lenses	
	5.1	General	
	5.2	Transmittance categories	
	5.3	Solar ultraviolet transmittance	
	5.4	General transmittance requirements	
		5.4.1 Uniformity of luminous transmittance and transmittance matching Ultraviolet transmittance of the frame or housing	
	5.5	Special transmittance requirements	
	5.5	5.5.1 Photochromic lenses	
		5.5.2 Polarizing lenses	
		5.5.3 Gradient-tinted lenses	
	5.6	Claimed transmittance and reflectance properties (optional requirements	6)6
		5.6.1 General	
		5.6.2 Solar blue-light absorption/transmittance	
		5.6.3 Solar UV absorption/transmittance	
		5.6.4 Anti-reflective coated lenses	
		5.6.5 Reduced reflection coated lenses	
_	_	5.6.6 Enhanced infrared absorption	
6		tered light	
7	Refr	active power	
	7.1	General	
	7.2	Spherical and cylindrical power	
	7.3	Spatial deviation	
	7.4 7.5	Prism imbalanceGoggles with inserts to carry prescription lenses	
_			
8		hanical testing	
	8.1 8.2	Temperature range	
	0.2	Mechanical strength level 2 8.2.1 Complete goggles	
		8.2.2 Goggles with inserts to carry prescription lenses	
		8.2.3 Failure criteria after impact	9
9	Resi	istance to solar ultraviolet radiation	
10		istance to ignition	
11		tection against water and snow	
12		d of view	
13	yıını	imum area to be protected	10

Anne	ex A (inf	formative) Selection and use of downhill skiing and snowboarding goggles	19
		Preparation and conditioning of test samples	
	16.1	tion of test samples General	15
16	Selec	tion of test samples	15
	15.4	Additional information to be available from the manufacturer	15
	15.3	Information to be supplied with goggles by the manufacturer	13
	15.2	Mandatory markings on goggles	13
	15.1	Assessment	13
15	Mark	ing and information to be supplied by the manufacturer	13
	14.3	Resistance to abrasion	12
	14.2	Resistance to fogging	12
	14.1	Extended low temperature range Resistance to fogging Resistance to abrasion	12
14	Optio	onal requirements	12
	13.2	Assessment of frontal protection Assessment of lateral protection	11
	13.1	Assessment of frontal protection	10

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).

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).

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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety* — *Personal protective equipment*, Subcommittee SC 6, *Eye and face protection*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 85, *Eye protective equipment*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 18527 series can be found on the ISO website.

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 family of documents comprised of the ISO 16321 series, the ISO 18526 series and the ISO 18527 series was developed in response to the worldwide stakeholders' demand for minimum requirements and test methods for eye and face protectors traded internationally. ISO 4007 gives the terms and definitions for all the various product types. The test methods are given in the ISO 18526 series, while the requirements for occupational eye and face protectors are given in the ISO 16321 series. Eye protectors for specific sports are mostly dealt with by the ISO 18527 series. A guidance document, ISO 19734, for the selection, use and maintenance of eye and face protectors is under preparation.

Eye and face protection for sports use —

Part 1:

Requirements for downhill skiing and snowboarding goggles

1 Scope

This document applies to all goggles with plano lenses, intended for eye protection against hazards including ultraviolet and visible solar radiation, rain, snow and wind, during downhill skiing, snowboarding and other similar activities.

This document applies to downhill skiing and snowboarding goggles fitted with an insert to carry prescription lenses.

It specifies requirements and testing for materials, performance, marking of goggles and information to be supplied by the manufacturer.

Information on the selection and use of downhill skiing and snowboarding goggles is given in Annex A.

This document does not apply to

- a) eye protectors for protection when operating or travelling on a motorized vehicle,
- b) eye protectors for protection against optical radiation from artificial sources, such as those used in solaria,
- c) eye protectors for direct observation of the sun, and
- d) eye protectors intended for sports with unrelated hazards and risks.

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 4007, Personal protective equipment — Eye and face protection — Vocabulary

ISO 8980-5, Ophthalmic optics — Uncut finished spectacle lenses — Part 5: Minimum requirements for spectacle lens surfaces claimed to be abrasion-resistant

ISO 11664-2, Colorimetry — Part 2: CIE standard illuminants

ISO 18526-1:2020, Eye and face protection — Test methods — Part 1: Geometrical optical properties

ISO 18526-2:2020, Eye and face protection — Test methods — Part 2: Physical optical properties

ISO 18526-3:2020, Eye and face protection — Test methods — Part 3: Physical and mechanical properties

ISO 18526-4, Eye and face protection — Test methods — Part 4: Headforms

ISO 21987, Ophthalmic optics — Mounted spectacle lenses