



# SLOVENSKI STANDARD SIST EN ISO 19818-1:2021

01-september-2021

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## Varovanje oči in obraza - Zaščita pred laserskimi žarki - 1. del: Zahteve in preskusne metode (ISO 19818-1:2021)

Eye and face protection - Protection against laser radiation - Part 1: Requirements and test methods (ISO 19818-1:2021)

Augen- und Gesichtsschutz - Schutz vor Laserstrahlung - Teil 1: Anforderungen und Prüfverfahren (ISO 19818-1:2021)

Protection des yeux et du visage - Protection contre le rayonnement laser - Partie 1: Exigences et méthodes d'essai (ISO 19818-1:2021)

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Ta slovenski standard je istoveten z: **EN ISO 19818-1:2021**

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### ICS:

13.340.20 Varovalna oprema za glavo Head protective equipment

**SIST EN ISO 19818-1:2021**

**de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 19818-1**

June 2021

ICS 13.340.20

English Version

**Eye and face protection - Protection against laser radiation  
- Part 1: Requirements and test methods (ISO 19818-  
1:2021)**

Protection des yeux et du visage - Protection contre le rayonnement laser - Partie 1: Exigences et méthodes d'essai (ISO 19818-1:2021)

Augen- und Gesichtsschutz - Schutz vor Laserstrahlung - Teil 1: Anforderungen und Prüfverfahren (ISO 19818-1:2021)

This European Standard was approved by CEN on 22 June 2021.

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.

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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.

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## European foreword

This document (EN ISO 19818-1:2021) 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 December 2021, and conflicting national standards shall be withdrawn at the latest by June 2024.

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.

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

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The text of ISO 19818-1:2021 (standards.iteh.ai) has been approved by CEN as EN ISO 19818-1:2021 without any modification.

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ISO  
19818-1

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2021-06

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**Eye and face protection — Protection  
against laser radiation —**

**Part 1:  
Requirements and test methods**

*Protection des yeux et du visage — Protection contre le rayonnement  
laser —*

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## ISO 19818-1:2021(E)

### 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 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). The document was developed as a joint project with IEC/TC 76, "Optical radiation safety and laser equipment".

This first edition of ISO 19818-1 cancels and replaces the first edition of ISO 6161:1981, which has been technically revised.

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

## Introduction

This document was developed in response to the worldwide stakeholders' demand for minimum requirements and test methods for laser eye and face protectors traded internationally.

Preparation of this document aimed to draw upon the best aspects of these preceding standards, and offer improvements where appropriate. The document was developed by a Joint Working Group involving experts from ISO/TC 94/SC 6 (Eye and Face Protection) and IEC/TC 76 (Optical Radiation Safety and Laser Equipment), to bring together the two aspects of personal protection and laser safety.

In the general context of eye and face protection ISO 4007 gives the terms and definitions. 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. ISO 19734 is a guidance document for the selection, use and maintenance of eye and face protectors.

A guidance document addressing selection and use of personal eye and face protection against lasers is currently under development and will form a guide to users of protectors described in this document.

NOTE ISO 6161 was published in 1981 but was not widely adopted. The document was four pages in length. No development of that document has taken place since 1981, although comparable regional standards have since been developed (EN 207<sup>[5]</sup> and EN 208<sup>[6]</sup> in Europe; ANSI Z136.7<sup>[7]</sup> in the United States).

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