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## Eye and face protection — Sunglasses and related eyewear —

### Part 1: Sunglasses for general use

*Protection des yeux et du visage — Lunettes de soleil et articles de  
lunetterie associés —*

*Partie 1: Lunettes de soleil pour usage général*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 12312-1 was prepared by Technical Committee ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 6, *Eye and face protection*.

ISO 12312 consists of the following parts, under the general title *Eye and face protection — Sunglasses and related eyewear*:

— *Part 1: Sunglasses for general use*

The following parts are under preparation:

— *Part 2: Eye protectors for direct observation of the sun*

# Eye and face protection — Sunglasses and related eyewear —

## Part 1: Sunglasses for general use

### 1 Scope

This part of ISO 12312 is applicable to all afocal (plano power) sunglasses and clip-ons for general use, including road use and driving, intended for protection against solar radiation.

Information on the use of sunglass filters is given in [Annex A](#). Requirements for unmounted filters used as replacement or alternative filters are given in [Annex B](#).

This part of ISO 12312 is not applicable to:

- a) eyewear for protection against radiation from artificial light sources, such as those used in solaria;
- b) eye protectors intended for specific sports (e.g. ski goggles or other types);
- c) sunglasses that have been medically prescribed for attenuating solar radiation;
- d) products intended for direct observation of the sun, such as for viewing a partial or annular solar eclipse.

### 2 Normative references

The following referenced documents are indispensable for the application 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 12311:2013, *Personal protective equipment — Test methods for sunglasses and related equipment*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4007 and the following apply.

#### 3.1

##### **related eyewear**

eyewear intended for protection in the same wavelength range as solar radiation but not necessarily originated by natural sunlight

### 4 Construction and materials

#### 4.1 Construction

When tested in accordance with ISO 12311:2013, Clause 6, areas of the sunglass, including the frame and the edges of the filters, if in a rimless or semi-rimless style, that might, during intended use, come into contact with the wearer, shall be smooth and without sharp projections.