SLOVENSKI STANDARD
oSIST prEN ISO 12311:2011

01-april-2011

Osebna varovalna oprema - Preskusne metode za sončna očala in podobno opremo (ISO/DIS 12311:2011)

Personal protective equipment - Test methods for sunglasses and related equipment (ISO/DIS 12311:2011)

Persönliche Schutzausrüstung - Prüfverfahren für Sonnenbrillen und ähnlichen Augenschutz (ISO/DIS 12311:2011)

Équipement de protection individuelle - Méthodes d'essai pour lunettes de soleil et équipement associé (ISO/DIS 12311:2011)

Ta slovenski standard je istoveten z: **prEN ISO 12311**

ICS:

11.040.70	Oftalmološka oprema	Ophthalmic equipment
13.340.20	Varovalna oprema za glavo	Head protective equipment

oSIST prEN ISO 12311:2011 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN ISO 12311

January 2011

ICS 13.340.20

English Version

Personal protective equipment - Test methods for sunglasses and related equipment (ISO/DIS 12311:2011)

Équipement de protection individuelle - Méthodes d'essai pour lunettes de soleil et équipement associé (ISO/DIS 12311:2011)

Persönliche Schutzausrüstung - Prüfverfahren für Sonnenbrillen und ähnlichen Augenschutz (ISO/DIS 12311:2011)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 85.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Foreword

This document (prEN ISO 12311:2011) has been prepared by Technical Committee ISO/TC 94 “Personal safety - Protective clothing and equipment” in collaboration with Technical Committee CEN/TC 85 “Eye protective equipment” the secretariat of which is held by AFNOR.

This document is currently submitted to the parallel Enquiry.

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).

Endorsement notice

The text of ISO/DIS 12311:2011 has been approved by CEN as a prEN ISO 12311:2011 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 12311

ISO/TC **94**/SC **6** Secretariat: **BSI**

Voting begins on **2011-01-20** Voting terminates on **2011-06-20**

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Personal protective equipment — Test methods for sunglasses and related equipement

Équipement de protection individuelle — Méthodes d'essai pour lunettes de soleil et équipement associé

ICS 13.340.20

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

Conformément aux dispositions de la Résolution du Conseil 15/1993, ce document est distribué en version anglaise seulement.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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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 12311 was prepared by Technical Committee ISO/TC 94, *Personal safety - Protective clothing and equipment*, Subcommittee SC 6, *Eye and face protection*.

Introduction

This draft international standard supports the specific device requirements for sunglasses and related eyewear. Test methods are specified for complete sunglasses or their components.

Personal protective equipment — Test methods for sunglasses and related equipment

1 Scope

This International Standard specifies the reference test methods for determining the sunglasses properties given in ISO 12312-1. It is applicable to all sunglasses and related equipment.

NOTE. Other test methods may be used if shown to be equivalent.

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 12312-1, *Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO/DIS 4007: 2009, *Personal protective equipment — Eye and face protection — Vocabulary*

ISO/CIE 10527: 2007, *CIE standard colorimetric observers*

ISO/CIE 10526: 2007, *CIE standard illuminants for colorimetry*

CIE 85:1989, *Solar spectral irradiance*

3 Terms and definitions

For the purposes of this international Standard, the terms and definitions given in ISO/DIS 4007 apply.

4 Prerequisites

The following parameters shall be specified prior to testing (see ISO 12312-1):

— the number of specimens;

— device preparation;

— any prior conditioning or testing;

— any deviations from the method(s);

— characteristics to be assessed subjectively (inappropriate);

— pass/fail criteria.

5 General test requirements

Unless otherwise specified, the values stated in this international standard are expressed as nominal values. Except for temperature limits, values which are not stated as maxima or minima shall be subject to a tolerance of ± 5%. Unless otherwise specified, the ambient temperature for testing shall be between 16 °C and 32 °C and any temperature limits specified shall be subject to an accuracy of ± 1 °C.

6 Test methods for assessing the construction and materials

6.1 Prior assessment of construction

Prior to applying the test methods, a visual inspection shall be carried out with normal or corrected vision, without magnification, in order to assess the sunglass, marking and information supplied by the manufacturer and safety data sheets (if applicable) or declaration relevant to the materials used in its construction.

6.2 Test method for assessment of filter material and surface quality

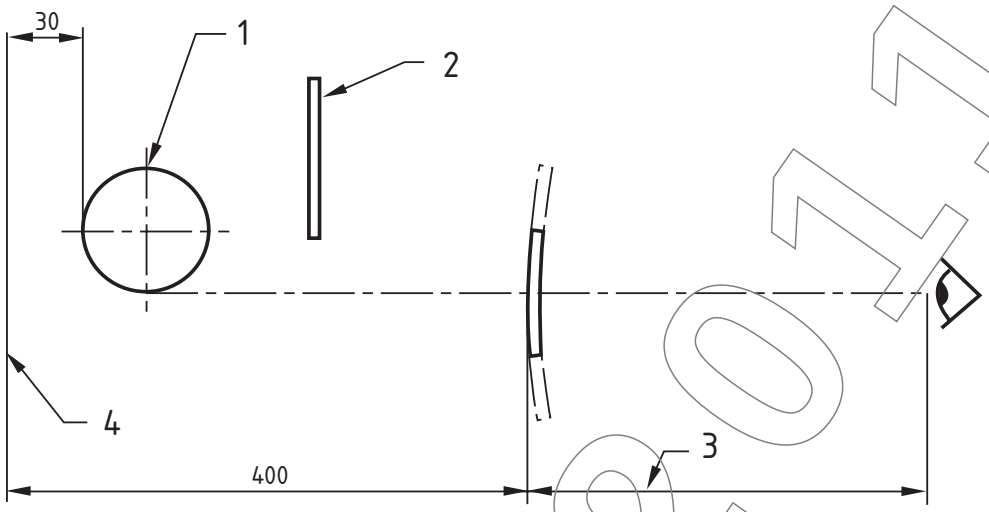
6.2.1 Principle

The quality of the filter material and surface is assessed by visual inspection.

6.2.2 Apparatus

A suitable apparatus is shown in Figure 1.

Dimensions in millimetres



Key

1	Lamp	3	Near vision distance (≈300)
2	Adjustable opaque dull black mask	4	Dull black background (200 x 360)

Figure 1 — Arrangement of apparatus for assessment of quality of material and surface

6.2.3 Test procedure

Carry out the assessment of the quality of material and surface by visual inspection with the aid of a `light box' or illuminated grid.

NOTE One method of inspection in current use consists of an illuminated grid as a background to be viewed through the ocular which is held at various distances from the eye. Another method is to illuminate the ocular by means of a fluorescent lamp mounted within a dull black chamber and with the amount of illumination adjusted by means of an adjustable opaque black mask. A suitable arrangement is shown in Figure 7.

If there is any doubt concerning the acceptability of the quality of the material and surface then examinine the areas in question with a light beam of 5 mm nominal diameter or use objective tests for wide angle scatter (see 7.3).

6.2.4 Test report

Except for a marginal area 5 mm wide at the edge of the eye protector, any significant defects likely to impair vision in use shall be recorded in the test report. Materials and surface shall be free of visible defects.