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Personal protective equipment — Test methods for sunglasses and related eyewear

Équipement de protection individuelle — Méthodes d'essai pour lunettes de soleil et articles de lunetterie associés

Reference number
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Foreword

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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 document 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).

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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).

This second edition cancels and replaces the first edition (ISO 12311:2013), which has been technically revised.

The main changes are as follows:

— with the publication of the four parts of ISO 18526 in 2020, which provides test methods and specifications for head forms for the compliance testing of eye protectors, it was deemed unnecessary to reproduce details of these test methods in ISO 12311. They have therefore been removed. Test methods that have been retained in this document are those developed originally for testing of spectacle frames, that cannot be found in ISO 18526-3. Corresponding Annexes that supplemented the now deleted test methods have also been removed.

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.

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Personal protective equipment — Test methods for sunglasses and related eyewear

1 Scope

This document specifies reference's test methods for determining the properties of sunglasses given in ISO 12312 (all parts). It is applicable to all sunglasses and related eyewear.

Other test methods can be used if proven to be equivalent.

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 1042, *Laboratory glassware — One-mark volumetric flasks*

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

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

ISO 8624, *Ophthalmic optics — Spectacle frames — Measuring system and vocabulary*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4007 and ISO 8624 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Prerequisites

The following parameters shall be specified prior to testing [see ISO 12312 (all parts)]:

— the number of test samples;

— test sample preparation;

— any conditioning prior to testing;

— characteristics to be assessed subjectively (if appropriate);

— pass/fail criteria.

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