AS/NZS ISO 18526.1:2021
ISO 18526-1:2020

Australian/New Zealand Standard™

Eye and face protection — Test methods

Method 1: Geometrical optical properties

AS/NZS ISO 18526.1:2021

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee SF-006, Eye and Face Protection. It was approved on behalf of the Council of Standards Australia on 12 July 2021 and by the New Zealand Standards Approval Board on 04 August 2021.

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The following are represented on Committee SF-006:

Association of Accredited Certification Bodies
Australasian Fire and Emergency Service Authorities Council
Australian and New Zealand Society of Occupational Medicine
Australian Chamber of Commerce and Industry
Australian Competition and Consumer Commission
Australian Dispensing Opticians Association
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Australian Radiation Protection and Nuclear Safety Agency Better Regulation Division (Fair Trading, Safe Work NSW, TestSafe)
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Optometry Australia
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First published as AS/NZS ISO 18526.1:2021.

Preface

This Test Method was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-006, Eye and Face Protection.

The objective of this document is to specify the reference test methods for determining the spherical, cylindrical, and prismatic refractive power properties of unmounted and mounted plano lenses (non-corrective lenses) for eye and face protectors.

This document does not apply to any eye and face protection product requirement standards for which other test methods are specified.

Other test methods can be used provided they have been shown to be equivalent and include uncertainties of measurement no greater than those required by the reference method.

This document is identical with, and has been reproduced from, ISO 18526-1:2020, *Eye and face protection — Test methods — Part 1: Geometrical optical properties.*

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

Contents

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 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.*

This first edition of ISO 18526-1, together with ISO 18526-2, cancels and replaces ISO 4854:1981 which has been technically revised.

A list of all parts in the ISO 18526 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

The 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.

NOTES

Australian/New Zealand Standard

Eye and face protection — Test methods

Method 1: Geometrical optical properties

1 Scope

This document specifies the reference test methods for determining the spherical, cylindrical, and prismatic refractive power properties of unmounted and mounted plano lenses (non-corrective lenses) for eye and face protectors.

This document does not apply to any eye and face protection product requirement standards for which other test methods are specified.

Other test methods can be used provided they have been shown to be equivalent and include uncertainties of measurement no greater than those required by the reference method.

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

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

ISO 18526-4:2020, *Eye and face protection — Test methods — Part 4: Headforms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4007 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 http://www.electropedia.org/

4 Preparatory information

Before testing, refer to the appropriate product's requirements standard for the information needed to apply the tests in this document, for example:

— the number of test samples[1)];

— preparation of test samples;

— the selection of test samples (if included in this document);

— any prior conditioning or testing;

— test method (if more than one are included in this document);

— any deviations from the method(s);

1) For the purpose of this document, “test sample” is taken to be the object under test, e.g. “lens”, “filter” or “complete protector” as specified in the requirement standards.