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Australian STANDARD

Ophthalmic optics—Semi-finished spectacle lens blanks

Part 1: Specifications for single-vision and multifocal lens blanks

STANDARDS Australia

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Australian Dispensing Opticians Association
Optical Distributors and Manufacturers Association of Australia
Optometry Australia
Queensland University of Technology
University of New South Wales

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Part 1: Specifications for single-vision and multifocal lens blanks

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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee, MS-024 Spectacles, to supersede AS/NZS ISO 10322.1:2011, *Ophthalmic optics—Semi-finished spectacle lens blanks,* Part 1: *Specifications for single-vision and multifocal lens blanks*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify requirements for the optical and geometrical properties of all semi-finished single-vision and multifocal spectacle lens blanks.

This Standard is identical with, and has been reproduced from, ISO 10322-1:2016, *Ophthalmic optics — Semi-finished spectacle lens blanks* — Part 1: *Specifications for single-vision and multifocal lens blanks*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text 'this part of ISO 10322' should read 'this Australian Standard',

(b) A full point substitutes for a coma 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.

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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.

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

This fourth edition cancels and replaces the third edition (ISO 10322-1:2006), which has been technically revised.

ISO 10322 consists of the following parts, under the general title *Ophthalmic optics — Semi-finished spectacle lens blanks*:

— *Part 1: Specifications for single-vision and multifocal lens blanks*

— *Part 2: Specifications for progressive-power and degressive-power lens blanks*

Introduction

Compared with previous editions, this part of ISO 10322 now applies to all types of semi-finished single-vision and multifocal lens blanks.

Australian Standard®

Ophthalmic optics—Semi-finished spectacle lens blanks

Part 1: Specifications for single-vision and multifocal lens blanks

1 Scope

This part of ISO 10322 specifies requirements for the optical and geometrical properties of all semi-finished single-vision and multifocal spectacle lens blanks.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7944, *Optics and optical instruments — Reference wavelengths*

ISO 8598-1, *Optics and optical instruments — Focimeters — Part 1: General purpose instruments*

ISO 13666, *Ophthalmic optics — Spectacle lenses — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 apply.

4 Classification

Semi-finished lens blanks (shortened to lens blanks in the remainder of this part of ISO 10322 for easier reading) are classified according to the finished surface as follows:

a) single-vision lens blanks;

b) multifocal lens blanks;

c) progressive-power and degressive-power lens blanks.

5 Requirements

5.1 General

The tolerances shall apply at a temperature of 23 °C ± 5 °C.

5.2 Optical requirements for the finished surface

5.2.1 General

The optical tolerances shall apply to the manufacturer's stated values at the reference points of the lens blank at one of the reference wavelengths specified in ISO 7944.

The reference point should be specified by the manufacturer. If no reference point is specified, the blank's geometric centre may be assumed to be the reference point.

The optical tolerances in Tables 1, 2 and 3 are expressed as surface power values, in dioptres, in the refractive index of the material of the lens blank being measured.