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BS EN ISO 10322-1:2016



BSI Standards Publication

Ophthalmic optics — Semi-finished spectacle lens blanks

Part 1: Specifications for single-vision and multifocal lens blanks (ISO 10322-1:2016)

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This British Standard is the UK implementation of EN ISO 10322-1:2016. It supersedes BS EN ISO 10322-1:2006 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CH/172/3, Spectacles.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Ophthalmic optics - Semi-finished spectacle lens blanks - Part 1: Specifications for single-vision and multifocal lens blanks (ISO 10322-1:2016)

Optique ophtalmique - Verres de lunettes semi-finis -
Partie 1: Spécifications pour les verres unifocaux et
multifocaux (ISO 10322-1:2016)

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Anforderungen an Ein- und Mehrstärken-
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This European Standard was approved by CEN on 26 December 2015.

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European foreword

This document (EN ISO 10322-1:2016) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" in collaboration with Technical Committee CEN/TC 170 "Ophthalmic optics" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 10322-1:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10322-1:2016 has been approved by CEN as EN ISO 10322-1:2016 without any modification.

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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).

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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*

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Introduction

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

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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 $23\text{ °C} \pm 5\text{ °C}$.

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.