

**Ophthalmic optics - Uncut finished  
spectacle lenses - Part 5: Minimum  
requirements for spectacle lens surfaces  
claimed to be abrasion-resistant**

Ophthalmic optics - Uncut finished spectacle lenses  
- Part 5: Minimum requirements for spectacle lens  
surfaces claimed to be abrasion-resistant

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 8980-5:2005 sisaldab Euroopa standardi EN ISO 8980-5:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.09.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 8980-5:2005 consists of the English text of the European standard EN ISO 8980-5:2005.</p> <p>This document is endorsed on 29.09.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This part of ISO 8980 specifies the requirement and test method for spectacle lens surfaces that are claimed to provide a basic level of abrasion resistance including those with coatings.</p>	<p><b>Scope:</b> This part of ISO 8980 specifies the requirement and test method for spectacle lens surfaces that are claimed to provide a basic level of abrasion resistance including those with coatings.</p>
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**ICS** 11.040.70

**Võtmesõnad:**

English Version

**Ophthalmic optics - Uncut finished spectacle lenses - Part 5:  
Minimum requirements for spectacle lens surfaces claimed to be  
abrasion-resistant (ISO 8980-5:2005)**

Optique ophtalmique - Verres de lunettes finis non détourés  
- Partie 5: Exigences minimales pour les surfaces de verres  
de lunettes déclarées être résistantes à l'abrasion (ISO  
8980-5:2005)

Augenoptik - Rohkantige fertige Brillengläser - Teil 5:  
Mindestanforderungen an die Oberflächen abriebfester  
Brillengläser (ISO 8980-5:2005)

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## Foreword

This document (EN ISO 8980-5:2005) has been prepared by Technical Committee ISO/TC 172 "Optics and optical instruments" 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 February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

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## Endorsement notice

The text of ISO 8980-5:2005 has been approved by CEN as EN ISO 8980-5:2005 without any modifications.

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**Ophthalmic optics — Uncut finished  
spectacle lenses —**

**Part 5:**

**Minimum requirements for spectacle lens  
surfaces claimed to be abrasion-resistant**

*Optique ophtalmique — Verres de lunettes finis non détournés —*

*Partie 5: Exigences minimales pour les surfaces de verres de lunettes  
déclarées être résistantes à l'abrasion*



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## Foreword

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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 8980-5 was prepared by Technical Committee ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

ISO 8980 consists of the following parts, under the general title *Ophthalmic optics — Uncut finished spectacle lenses*:

- *Part 1: Specifications for single-vision and multifocal lenses*
- *Part 2: Specifications for progressive power lenses*
- *Part 3: Transmittance specifications and test methods*
- *Part 4: Specifications and test methods for anti-reflective coatings*
- *Part 5: Minimum requirements for spectacle lens surfaces claimed to be abrasion-resistant*





# Ophthalmic optics — Uncut finished spectacle lenses —

## Part 5:

## Minimum requirements for spectacle lens surfaces claimed to be abrasion-resistant

### 1 Scope

This part of ISO 8980 specifies the requirement and test method for spectacle lens surfaces that are claimed to provide a basic level of abrasion resistance including those with coatings.

A lens claimed to be abrasion-resistant shall meet the requirements on both front and back surfaces.

Lens powers and surface form is restricted for testing, however test results are applicable to claims for lenses and lens surfaces with identical properties other than the lens power or surface radius.

This part of ISO 8980 does not attempt to define the properties of lens surfaces with abrasion resistance better than the following defined criteria.

### 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 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

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

ISO 8980-4, *Ophthalmic optics — Uncut finished spectacle lenses — Part 4: Specifications and test methods for anti-reflective coatings*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13666 and in ISO 8980-4 and the following apply.

#### 3.1

##### **abrasion resistance**

property of a spectacle lens surface to resist damage during normal use such as scratches caused by cleaning or wear