



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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Sunglasses and sun glare filters - Part 1: General requirements

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Foreword

GB/T 39552 "Sunglasses and sunglare filters" is divided into two parts.

- Part 1.General requirements;
- Part 2.Test methods.

This Part is Part 1 of GB/T 39552.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part uses redrafting method to modify and adopt ISO 12312-1.2013 "Eye and face protection - Sunglasses and related eyewear - Part 1.Sunglasses for general use".

Compared with ISO 12312-1.2013, there are many structural adjustments in

this Part. Annex A lists a chapter number comparison list between this Part and ISO 12312-1:2013.

The technical differences between this Part and ISO 12312-1:2013 as well as the reasons are as follows.

- Regarding normative references, this Part has made adjustments with technical differences to adapt to China's technical conditions. The adjustments are collectively reflected in Chapter 2 "Normative references", and the specific adjustments are as follows.

- * added GB 10810.1 (see 6.1.5), GB/T 14214-2019 (see 11.2), GB/T

26397 (see Chapter 3), GB/T 39552.2-2020 (see Chapter 5, Chapter 6, Chapter 7, Chapter 8, Chapter 9, Chapter 10, 11.1, Chapter 13) as references;

- * used GB 10810.5 that was modified by adopting ISO 8980-5 to replace ISO 8980-5 (see Chapter 14);

- * deleted ISO 4007.

- Deleted the requirements for local change of vertex power in Chapter 6; in Chapter 12, deleted the requirements for temporal protection, so as to adapt to China's technical conditions;

- Added the transmittance performance requirements for prescription corrective sunglasses and sunglare filters, the solar spectral transmittance requirements below the cut-off wavelength (see Chapter 5); Added coating bond strength (see Chapter 11), nickel precipitation (see Chapter 15); Adjusted the corresponding requirements in the impact strength of the filters (see Chapter 13) to meet the market demand;

- Deleted Annex B; Merged the relevant technical requirements of Annex B into Chapter 5, Chapter 6, Chapter 13, and Chapter 17, so as to increase the operability of the standard content.

This Part was proposed by and shall be under the jurisdiction of Ministry of

Industry and Information Technology of the People's Republic of China.

Sunglasses and sunglare filters - Part 1.General

requirements

1 Scope

This Part of GB/T 39552 specifies classification, requirements, test sample selection, marks and packaging for plain sunglasses and sunglare filters.

This Part is applicable to general purpose (for example, road use and driving) sunglasses, sunglare filters, sunglasses clips and lens sets. Refer to this Part for the transmittance requirements of prescription corrective sunglasses and sunglare filters.

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.

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T

26397 as well as the followings apply.

When the lens has one of the following conditions, it is called lens fractured.

Sunglasses designed to eliminate the prism effect caused by the base curve of the filter.

4 Structure and material

Take the reference point as the center. Within the area with a diameter of 30mm (excluding the width of 5mm from the edge of the filter), there shall be no defects on the surface or inside of the filter that may be harmful to vision.

5 Transmittance

For photochromic filters, when expressing the transmission performance of photochromic filters, two categories shall be used, corresponding to the transmittance of the filter in the color-fading state and the discolored state. Its classification shall meet the requirements of Table 1.

6 Optical properties

In the wearing position of the sunglasses, use the telescope method to measure (other equivalent methods can also be used, such as the focal meter method). The deviation of the spherical and cylindrical powers shall meet the requirements of Table 2.

7 Fatigue strength of sunglasses

The test is carried out in accordance with the method specified in 8.1 of GB/T 39552.2-2020, and the following requirements shall be met.

8 Nose bridge deformation and lens holding force

The test is carried out according to the method specified in 8.2 of GB/T 39552.2-2020, and the following requirements shall be met.

9 Resistance to light radiation

The relative change limit value of the transmittance of the filters before and after irradiation is calculated according to formula (1). The relative change value shall meet the requirements of Table 4. The inspection shall be carried out in accordance with the method specified in 8.3 of GB/T 39552.2-2020.

10 Flame retardant

Test according to the method specified in 8.4 of GB/T 39552.2-2020. All parts of the sunglasses (including at least the temples, rings and filters) shall not continue to burn.

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