



**International
Standard**

ISO 16321-1

**Eye and face protection for
occupational use —**

Part 1:

General requirements

AMENDMENT 1

Protection des yeux et du visage à usage professionnel —

Partie 1: Exigences générales

AMENDEMENT 1

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**AMENDMENT 1
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[ISO 16321-1:2021/Amd.1:2024](https://standards.iteh.ai/ISO/16321-1:2021/Amd.1:2024)

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Eye and face protection for occupational use —

Part 1: General requirements

AMENDMENT 1

Scope

Add at the end of the second paragraph:

"ISO 16321-4 provides requirements and guidance on protectors against biological hazards¹⁾."

and the following footnote:

"¹⁾ In preparation."

Clause 2, Normative references

Change the date of ISO 12312-1 to 2022.

5.1

[ISO 16321-1:2021/Amd 1:2024](https://standards.iteh.ai/catalog/standards/iso/994f6132-4a2a-4035-8b67-e4e06ae3a0d3/iso-16321-1-2021-amd-1-2024)

Replace the two existing paragraphs with:

"Excluding face shields and eye shields mounted on another item of PPE that restricts the superior field of view, e.g., a protective helmet, bumpcap, headgear or hood, protectors, when in the as-worn position and measured at the corneal apices of the headform in accordance with ISO 18526-3:2020, 6.2, shall have a minimum unobstructed field of view in front of each eye of 30° temporally and nasally in the horizontal meridian, and 30° superiorly and inferiorly in the vertical meridian.

Face shields and eye shields mounted on another item of PPE that restricts the superior field of view, when in the as-worn position and measured at the corneal apices of the headform in accordance with ISO 18526-3:2020, 6.2, shall have a minimum unobstructed field of view in front of each eye of 30° temporally and nasally in the horizontal meridian, and

- a minimum vertical field of view in the superior direction of not less than 7°, and
- a minimum field of view in the inferior direction of 30°, and
- a minimum field of view in the vertical direction (superior and inferior combined) of 60°.

Protectors used for driving shall have a minimum unobstructed field of view in front of each eye of 60° temporally and 30° nasally in the horizontal meridian and 30° superiorly and inferiorly in the vertical meridian, when measured at the corneal apices of the headform in accordance with ISO 18526-3:2020, 6.2."

6.3.3.2, Table 8

Amend the headers in columns 3 and 4, row 4 (change of < to ≤):

Table 8 — Transmittance requirements for sunglare filters for occupational use, code letter G

Scale number	Wavelength range from 280 nm to 400 nm			Visible spectral range	Optional infra-red spectral range
	Maximum solar UV-B transmittance	Maximum solar UV-A transmittance	Maximum mean 380 nm to 400 nm transmittance	Luminous transmittance	Maximum solar IR transmittance
	τ_{SUVB} 280 nm ≤ λ ≤ 315 nm %	$\tau_{\text{SUVA 380}}$ 315 nm ≤ λ ≤ 380 nm %	$\tau_{\text{m380-400}}$ 380 nm ≤ λ ≤ 400 nm %	$\tau_{\text{v,D65}}$ 380 nm ≤ λ ≤ 780 nm %	τ_{SIR} 780 nm ≤ λ ≤ 2 000 nm %

6.3.3.3

Replace the existing text with:

"Sunglare filters that meet the mandatory transmittance requirements given in Table 8 shall be marked by code letter G. Sunglare filters of shade numbers 0, 1, 2 or 3 shall comply with the requirements of 6.1, detection of signal lights, and shall be marked with G0, G1, G2 or G3. Sunglare filters of scale number G0, G1, G2 or G3 are suitable for road use and driving.

Sunglare filters of scale number G4 comply with the requirements of 6.1 but are not suitable for road use and driving.

Photochromic filters shall be identified and labelled with their shade numbers corresponding to their faded state $\tau_{\text{v,0}}$ and darkened state $\tau_{\text{v,1}}$, e.g. G0-2.

Sunglare filters that are claimed to meet the optional infrared transmittance requirements shall be marked with the code letter GR."

6.3.3.4.2

In the second paragraph, delete code letter L and write as follows:

"When tested in accordance with ISO 18526-2:2020, 15.2, the polarizing efficiency, *P*, shall be ≥78 % for filter categories G2, G3, G4 and ≥60 % for filter category G1.

NOTE 1 Filters of category G0 do not have any useful polarizing effect."

6.3.3.4.3

In the second paragraph, delete code letter L and write as follows:

"...Table 8 and the detection of signal lights requirements from 6.1 (for filter number G0 to G3)..."

6.6