
**Optics and photonics — Optical
materials and components — Test
method for climate resistance of
optical glass**

*Optique et photonique — Matériaux et composants optiques —
Méthode d'essai pour la résistance climatique du verre optique*



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Optics and photonics — Optical materials and components — Test method for climate resistance of optical glass

1 Scope

This document specifies the test method for climate resistance of optical glass and the classification of the optical glass according to the test results.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 3585, *Borosilicate glass 3.3 — Properties*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 14782, *Plastics — Determination of haze for transparent materials*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

haze

percentage of transmitted light, passing through a specimen, which deviates from the incident light by no more than 0,044 rad (2,5°) by forward scattering

[SOURCE: ISO 14782:1999, 3.1]

4 Principle

To evaluate the climate resistance of optical glass in its operating environment, the hazes of polished glass surfaces before and after testing are measured with the haze meter specified in ISO 14782, and the climate resistance is determined by the change in the amount of haze.

5 Test apparatus

5.1 Configuration

The test apparatus consists of the components shown in [Figure 1](#). The size and arrangement of the components in the glass water tank are shown in [Figure 2](#).