

# INTERNATIONAL STANDARD

# ISO 11985

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## Ophthalmic optics — Contact lenses — Ageing by exposure to UV and visible radiation (*in vitro* method)

*Optique ophtalmique - Lentilles de contact - Vieillessement par exposition  
aux rayonnements UV et visible (méthode in vitro)*



Reference number  
ISO 11985:1997(E)

## 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 organisations, 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.

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.

International Standard ISO 11985 was prepared by ISO/TC 172 *Optics and optical instruments*, Subcommittee SC 7, *Ophthalmic optics and instruments*.

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# Ophthalmic optics — Contact lenses — Ageing by exposure to UV and visible radiation (*in vitro* method)

## 1 Scope

This International Standard describes an *in vitro* method which simulates the ageing of rigid (hard) and soft lenses in daylight.

The existence of this International Standard does not imply in any way that the testing of contact lenses for ageing by ultraviolet (UV) and visible radiation is a requirement.

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of the publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 10344:1996, *Optics and optical instruments — Contact lenses — Saline solution for contact lens testing.*

## 3 Principle

One aspect of the ageing of contact lenses in normal use is simulated by exposure to an intense source of light.

## 4 Apparatus

**4.1 High pressure xenon lamp**, with a quartz envelope and with filters giving a spectral distribution corresponding to that of solar radiation.

NOTE 1 An example of such a lamp is shown in figure 1.

NOTE 2 High intensity UV sources present radiation hazards if not properly shielded and safety hazards if not properly maintained.

**4.2 Infrared (IR) filter**, with a transmittance of less than 50 % of the incident radiation in the range 650 nm to 850 nm.

NOTE — An example of the transmittance of an IR filter is shown in figure 2.