



# SLOVENSKI STANDARD SIST EN ISO 14730:2015

01-januar-2015

Nadomešča:

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**Očesna optika - Kontaktne leče in izdelki za vzdrževanje kontaktnih leč -  
Preskušanje učinkovitosti antimikrobnih sredstev za konzerviranje in napotek za  
določanje datuma za zavrženje (ISO 14730:2014)**

Ophthalmic optics - Contact lens care products - Antimicrobial preservative efficacy  
testing and guidance on determining discard date (ISO 14730:2014)

Augenoptik - Kontaktlinsenpflegemittel - Konservierungsmittelbelastungstest und  
Anleitung zur Feststellung der Aufbrauchfrist (ISO 14730:2014)

Optique ophtalmique - Produits d'entretien des lentilles de contact - Essais de l'efficacité  
de conservation antimicrobienne et lignes directrices pour la détermination de la durée  
d'utilisation après première ouverture (ISO 14730:2014)

**Ta slovenski standard je istoveten z: EN ISO 14730:2014**

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**ICS:**

11.040.70      Oftalmološka oprema      Ophthalmic equipment

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EUROPEAN STANDARD

EN ISO 14730

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2014

ICS 11.040.70

Supersedes EN ISO 14730:2000

English Version

## Ophthalmic optics - Contact lens care products - Antimicrobial preservative efficacy testing and guidance on determining discard date (ISO 14730:2014)

Optique ophtalmique - Produits d'entretien des lentilles de contact - Essais de l'efficacité de conservation antimicrobienne et lignes directrices pour la détermination de la durée d'utilisation après première ouverture (ISO 14730:2014)

Augenoptik - Kontaktlinsenpflegemittel - Konservierungsmittelbelastungstest und Anleitung zur Feststellung der Aufbrauchfrist (ISO 14730:2014)

This European Standard was approved by CEN on 23 July 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (EN ISO 14730:2014) has been prepared by Technical Committee ISO/TC 172 "Optics and photonics" 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 April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 14730:2000.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

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INTERNATIONAL  
STANDARD

ISO  
14730

Second edition  
2014-10-01

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**Ophthalmic optics — Contact lens  
care products — Antimicrobial  
preservative efficacy testing and  
guidance on determining discard date**

*Optique ophtalmique — Produits d'entretien des lentilles de contact  
— Essais de l'efficacité de conservation antimicrobienne et lignes  
directrices pour la détermination de la durée d'utilisation après  
première ouverture*

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**ISO 14730:2014(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 organizations, 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 172, *Optics and photonics*, Subcommittee SC 7, *Ophthalmic optics and instruments* in collaboration with the Technical Committee CEN/TC 170, *Ophthalmic optics*.

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This second edition cancels and replaces the first edition (ISO 14730:2000), of which it constitutes a minor revision.

## Introduction

Contact lens care products (CLCP) are used with contact lenses. These products rinse, clean, disinfect, store, wet, aid the comfort of, and condition contact lenses. Some products have one function, while others are multifunctional.

Usually, products manufactured for use with hydrogel lenses may be used with rigid gas-permeable (RGP) or poly (methyl methacrylate) (PMMA) lenses, but products specifically used for RGP or PMMA contact lenses are not usually suitable for hydrogel lenses.

Most CLCPs are manufactured as solutions and are commonly packaged and sold in multidose containers. Dry products are sold as tablets or granules and shall be dissolved in a suitable solvent immediately prior to use.

If the contact lens care product solution does not have any antimicrobial activity itself, an antimicrobial preservative can be added to the product to inhibit the growth of microorganisms that might be introduced from repeated dispensing during use and subsequent storage. All antimicrobial agents have the potential for toxicity to the user. For maximum protection to the user, the concentration of the preservative should be such that it provides adequate preservative activity with minimum toxicity.

There are differences between ophthalmic preparations and contact lens care products and some of these differences are significant in relation to preservative efficacy testing. Typically, ophthalmic preparations are packaged in small-volume containers and are used for short periods on compromised eyes. Contact lens care products are distributed in larger volume containers and are used with contact lenses on a long term basis on healthy eyes. The potential risks for contact lens care products are the solution/lens interaction causing ocular irritation and the risks of the solution contamination by the repeated (daily) use of the product.

Thus, when contact lens care products are formulated, the risk of adverse patient reaction due to the lens and/or solution interaction has to be weighed against the benefits of safety derived from the maintenance of the antimicrobial activity of the solution.

This International Standard gives the test procedure and performance criteria for preservative efficacy. It has been adapted from Pharmacopoeias which give a time limitation in their test procedure of 28 d. The informative annexes give four examples of preservative efficacy test procedures developed by contact lens care product manufacturers to show preservative efficacy for products whose discard dates are over 28 d.

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