

**Plastid. Laboratuursete valgusallikatega
valgustamise meetodid. Osa 2:
Kaarlahendusega ksenoonlambid**

Plastics - Methods of exposure to laboratory light
sources - Part 2: Xenon-arc lamps

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 4892-2:2006 sisaldab Euroopa standardi EN ISO 4892-2:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 30.03.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 4892-2:2006 consists of the English text of the European standard EN ISO 4892-2:2006. This document is endorsed on 30.03.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
--	---

Käsitlusala: This part of ISO 4892 specifies methods for exposing specimens to xenon-arc light in the presence of moisture to reproduce the weathering effects that occur when materials are exposed in actual end-use environments to daylight or to daylight filtered through window glass.	Scope: This part of ISO 4892 specifies methods for exposing specimens to xenon-arc light in the presence of moisture to reproduce the weathering effects that occur when materials are exposed in actual end-use environments to daylight or to daylight filtered through window glass.
---	---

ICS 83.080.01

Võtmesõnad: artificial light tests, exposure, light sources, plastics, xenon lamps

EUROPEAN STANDARD

EN ISO 4892-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2006

ICS 83.080.01

Supersedes EN ISO 4892-2:1999

English Version

Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 4892-2:2006)

Plastiques - Méthodes d'exposition à des sources
lumineuses de laboratoire - Partie 2: Lampes à arc au
xénon (ISO 4892-2:2006)

Kunststoffe - Künstliches Bestrahlen oder Bewittern in
Geräten - Teil 2: Xenonbogenlampen (ISO 4892-2:2006)

This European Standard was approved by CEN on 28 October 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 4892-2:2006) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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 August 2006, and conflicting national standards shall be withdrawn at the latest by August 2006.

This document supersedes EN ISO 4892-2:1999.

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

Endorsement notice

The text of ISO 4892-2:2006 has been approved by CEN as EN ISO 4892-2:2006 without any modifications.

**Plastics — Methods of exposure to
laboratory light sources —**

**Part 2:
Xenon-arc lamps**

*Plastiques — Méthodes d'exposition à des sources lumineuses de
laboratoire —*

Partie 2: Lampes à arc au xénon



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
1 Scope.....	1
2 Normative references	1
3 Principle.....	1
4 Apparatus.....	2
5 Test specimens	6
6 Exposure conditions	6
7 Procedure	8
8 Exposure report	8
Annex A (informative) Filtered xenon-arc radiation — Spectral power distribution	9
Bibliography	10

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 4892-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

This second edition cancels and replaces the first edition (ISO 4892-2:1994), which has been technically revised.

ISO 4892 consists of the following parts, under the general title *Plastics — Methods of exposure to laboratory light sources*:

- *Part 1: General guidance*
- *Part 2: Xenon-arc lamps*
- *Part 3: Fluorescent UV lamps*
- *Part 4: Open-flame carbon-arc lamps*

Plastics — Methods of exposure to laboratory light sources —

Part 2: Xenon-arc lamps

1 Scope

This part of ISO 4892 specifies methods for exposing specimens to xenon-arc light in the presence of moisture to reproduce the weathering effects that occur when materials are exposed in actual end-use environments to daylight or to daylight filtered through window glass.

The specimens are exposed to filtered xenon-arc light under controlled conditions (temperature, humidity and/or wetting). Various types of xenon-arc light source and various filter combinations may be used to meet different requirements.

Specimen preparation and evaluation of the results are covered in other International Standards for specific materials.

General guidance is given in ISO 4892-1.

NOTE Xenon-arc exposures of paints and varnishes are described in ISO 11341.

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.

ISO 4582, *Plastics — Determination of changes in colour and variations in properties after exposure to daylight under glass, natural weathering or laboratory light sources*

ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*

3 Principle

3.1 A xenon arc, fitted with suitable filters and properly maintained, is used to simulate the spectral power distribution of daylight in the ultraviolet (UV) and visible regions of the spectrum.

3.2 Specimens are exposed to various levels of light, heat, relative humidity and water (see 3.4) under controlled environmental conditions.

3.3 The exposure conditions may be varied by selection of

- a) the light filter(s);
- b) the irradiance level;