SIST

SLOVENSKI STANDARD
oSIST prEN ISO 4892-3:2011

01-junij-2011

Polimerni materiali - Metode izpostavljanja laboratorijskim virom svetlobe - 3. del: Fluorescentne UV-svetilke (ISO/DIS 4892-3:2011)

Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps (ISO/DIS 4892-3:2011)

Kunststoffe - Künstliches Bestrahlen oder Bewittern in Geräten - Teil 3: UV-Leuchtstofflampen (ISO/DIS 4892-3:2011)

Plastiques - Méthodes d'exposition à des sources lumineuses de laboratoire - Partie 3: Lampes fluorescentes UV (ISO/DIS 4892-3:2011)

Ta slovenski standard je istoveten z: **prEN ISO 4892-3**

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general

oSIST prEN ISO 4892-3:2011 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

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Will supersede EN ISO 4892-3:2006

English Version

Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps (ISO/DIS 4892-3:2011)

Plastiques - Méthodes d'exposition à des sources lumineuses de laboratoire - Partie 3: Lampes fluorescentes UV (ISO/DIS 4892-3:2011)

Kunststoffe - Künstliches Bestrahlen oder Bewittern in Geräten - Teil 3: UV-Leuchtstofflampen (ISO/DIS 4892-3:2011)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 249.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

Foreword

This document (prEN ISO 4892-3:2011) 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 NBN.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 4892-3:2006.

Endorsement notice

The text of ISO/DIS 4892-3:2011 has been approved by CEN as a prEN ISO 4892-3:2011 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 4892-3

ISO/TC **61**/SC **6** Secretariat: **DIN**

Voting begins on **2011-04-14** Voting terminates on **2011-09-14**

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Plastics — Methods of exposure to laboratory light sources —

Part 3: Fluorescent UV lamps

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

Partie 3: Lampes fluorescentes UV

[Revision of second edition (ISO 4892-3:2006)]

ICS 83.080.01

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

Conformément aux dispositions de la Résolution du Conseil 15/1993, ce document est distribué en version anglaise seulement.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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Contents

Page

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 4892-3 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 4892-3:2006). The main technical changes are:

In Table 4, clear statement of irradiance

In Table 4, two exposure cycles are added

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*

Plastics — Methods of exposure to laboratory light sources —

Part 3: Fluorescent UV lamps

1 Scope

This part of ISO 4892 specifies methods for exposing specimens to fluorescent UV radiation, heat and water in apparatus designed to simulate the weathering effects that occur when materials are exposed in actual end-use environments to daylight, or to daylight through window glass.

The specimens are exposed to fluorescent UV lamps under controlled environmental conditions (temperature, humidity and/or water). Different types of fluorescent UV lamp may be used to meet all the requirements for testing different materials.

Specimen preparation and evaluation of the results are covered in other ISO documents for specific materials.

General guidance is given in ISO 4892-1.

NOTE Fluorescent UV lamp exposures for paints, varnishes and other coatings are described in ISO 11507[4].

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 Fluorescent UV lamps, when following manufacturer's recommendations for lamp maintenance and/or rotation, can be used to simulate the spectral irradiance of daylight in the short wavelanght ultraviolet (UV) region of the spectrum.

3.2 Specimens are exposed to various levels of UV radiation, heat and moisture (see 3.4) under controlled environmental conditions.

3.3 The exposure conditions may be varied by selection of:

a) The type of fluorescent UV lamp.

b) The irradiance level.

c) The temperature during the UV exposure.

d) The relative humidity of the chamber air during the UV and dark exposures, when test conditions requiring control of humidity are used.

NOTE Commercial fluorescent UV devices usually do not provide means of relative humidity control.

e) The type of wetting (see 3.4).

f) The wetting temperature and cycle.