

**Plastics - Methods of exposure to laboratory light
sources - Part 2: Xenon-arc lamps (ISO 4892-2:2013)**

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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4892-2:2013 sisaldab Euroopa standardi EN ISO 4892-2:2013 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4892-2:2013 consists of the English text of the European standard EN ISO 4892-2:2013.
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English Version

Plastics - Methods of exposure to laboratory light sources - Part
2: Xenon-arc lamps (ISO 4892-2:2013)

Plastiques - Méthodes d'exposition à des sources
lumineuses de laboratoire - Partie 2: lampes à arc au
xénon (ISO 4892-2:2013)

Kunststoffe - Künstliches Bestrahlen oder Bewittern in
Geräten - Teil 2: Xenonbogenlampen (ISO 4892-2:2013)

This European Standard was approved by CEN on 9 February 2013.

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Foreword

This document (EN ISO 4892-2:2013) 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 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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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Endorsement notice

The text of ISO 4892-2:2013 has been approved by CEN as EN ISO 4892-2:2013 without any modification.

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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 (temperature, humidity and/or wetting) that occur when materials are exposed in actual end-use environments to daylight or to daylight filtered through window glass.

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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

ISO 9370, *Plastics — Instrumental determination of radiant exposure in weathering tests — General guidance and basic test method*

3 Principle

3.1 A xenon arc, fitted with filters, is used to simulate the relative spectral irradiance 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 are varied by selection of

- a) the light filter(s);
- b) the irradiance level;
- c) the temperature during exposure to light;
- d) the relative humidity in the chamber during light and dark exposures, when exposure conditions requiring control of humidity are used;
- e) the way the test specimens are wetted (see 3.4);