

**Värvid ja lakid. Mõjutamine kunstlike
kliimatingimustega ja kiirgusega.
Katsetamine filtritud ksenoonvalguses**

Paints and varnishes - Artificial weathering and
exposure to artificial radiation - Exposure to filtered
xenon-arc radiation

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 11341:2004 sisaldab Euroopa standardi EN ISO 11341:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 11341:2004 consists of the English text of the European standard EN ISO 11341:2004.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This International Standard specifies a procedure for exposing paint coatings to artificial weathering in xenonarc lamp apparatus, including the action of liquid water and water vapour. The effects of this weathering are evaluated separately by comparative determination of selected parameters before, during and after weathering. The standard describes the most important parameters and specifies the conditions to be used in the exposure apparatus.</p>	<p>Scope:</p> <p>This International Standard specifies a procedure for exposing paint coatings to artificial weathering in xenonarc lamp apparatus, including the action of liquid water and water vapour. The effects of this weathering are evaluated separately by comparative determination of selected parameters before, during and after weathering. The standard describes the most important parameters and specifies the conditions to be used in the exposure apparatus.</p>
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ICS 87.040

Võtmesõnad: katsed, katsetingimused, katted, kunstlikud katsed, lakid, tehisvalguskatsed, värvid

English version

**Paints and varnishes – Artificial weathering and
exposure to artificial radiation**

Exposure to filtered xenon-arc radiation

(ISO 11341 : 2004)

Peintures et vernis – Vieillessement
artificiel et exposition au rayonnement
artificiel – Exposition au rayonnement
filtré d'une lampe à arc au xénon
(ISO 11341 : 2004)

Beschichtungsstoffe – Künst-
liches Bewittern und künstliches
Bestrahlen – Beanspruchung durch
gefilterte Xenonbogenstrahlung
(ISO 11341 : 2004)

This European Standard was approved by CEN on 2004-08-16.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

International Standard

ISO 11341 : 2004 Paints and varnishes – Artificial weathering and exposure to artificial radiation – Exposure to filtered xenon-arc radiation,

which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 139 'Paints and varnishes', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by March 2005 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

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

Endorsement notice

The text of the International Standard ISO 11341 : 2004 was approved by CEN as a European Standard without any modification.

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Introduction

Coatings of paints, varnishes and similar materials (subsequently referred to simply as coatings) are exposed to artificial weathering, or to artificial radiation, in order to simulate in the laboratory the ageing processes which occur during natural weathering or during exposure tests under glass cover.

In contrast to natural weathering, artificial weathering involves a limited number of variables which can be controlled more readily and which can be intensified to produce accelerated ageing.

The ageing processes which occur during artificial and natural weathering cannot be expected to correlate with each other because of the large number of factors which influence these processes. Definite relationships can only be expected if the important parameters (distribution of the irradiance over the photochemically relevant part of the spectrum, temperature of the specimen, type of wetting and wetting cycle, and relative humidity) are the same in each case or if their effect on the coatings is known.

1 Scope

This International Standard specifies a procedure for exposing paint coatings to artificial weathering in xenon-arc lamp apparatus, including the action of liquid water and water vapour. The effects of this weathering are evaluated separately by comparative determination of selected parameters before, during and after weathering.

The standard describes the most important parameters and specifies the conditions to be used in the exposure apparatus.

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 1513, *Paints and varnishes — Examination and preparation of samples for testing*

ISO 1514, *Paints and varnishes — Standard panels for testing*

ISO 2808, *Paints and varnishes — Determination of film thickness*

ISO 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

CIE Publication No. 85:1989, *Solar spectral irradiance*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

ageing behaviour

change in the properties of a coating during weathering or exposure to radiation

NOTE One measure of ageing is the radiant exposure H in the wavelength range below 400 nm or at a specified wavelength, e.g. 340 nm. The ageing behaviour of coatings exposed to artificial weathering, or to artificial radiation, depends on the type of coating, the conditions of exposure of the coating, the property selected for monitoring the progress of the ageing process and the degree of change of this property.