

**Paints and varnishes - Methods of exposure to  
laboratory light sources - Part 2: Xenon-arc lamps (ISO  
16474-2:2013)**

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English Version

## Paints and varnishes - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 16474-2:2013)

Peintures et vernis - Méthodes d'exposition à des sources lumineuses de laboratoire - Partie 2: Lampes à arc au xénon (ISO 16474-2:2013)

Beschichtungsstoffe - Künstliches Bestrahlen oder Bewittern in Geräten - Teil 2: Xenonbogenlampen (ISO 16474-2:2013)

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## Foreword

This document (EN ISO 16474-2:2013) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes" 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of an identical text or by endorsement, at the latest by May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.

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### Endorsement notice

The text of ISO 16474-2:2013 has been approved by CEN as EN ISO 16474-2:2013 without any modification.

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>2</b>
<b>5 Apparatus</b> .....	<b>3</b>
5.1 Laboratory light source.....	3
5.2 Test chamber.....	4
5.3 Radiometer.....	5
5.4 Black-standard/black-panel thermometer.....	5
5.5 Wetting and humidity-control equipment.....	5
5.6 Specimen holders.....	5
5.7 Apparatus to assess changes in properties.....	6
<b>6 Test specimens</b> .....	<b>6</b>
<b>7 Exposure conditions</b> .....	<b>6</b>
7.1 Radiation.....	6
7.2 Temperature.....	6
7.3 Relative humidity of chamber air.....	7
7.4 Spray cycle.....	8
7.5 Cycles with dark periods.....	8
7.6 Sets of exposure conditions.....	9
<b>8 Procedure</b> .....	<b>9</b>
8.1 General.....	9
8.2 Mounting the test specimens.....	9
8.3 Exposure.....	9
8.4 Duration of test.....	10
8.5 Measurement of radiant exposure.....	10
8.6 Determination of changes in properties after exposure.....	10
<b>9 Test report</b> .....	<b>10</b>
<b>Annex A (informative) Filtered xenon-arc radiation — Spectral power distribution</b> .....	<b>11</b>
<b>Annex B (normative) Additional exposure cycles</b> .....	<b>13</b>
<b>Bibliography</b> .....	<b>15</b>

## Introduction

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

# Paints and varnishes — Methods of exposure to laboratory light sources —

## Part 2: Xenon-arc lamps

### 1 Scope

This part of ISO 16474 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 lamps and various filter combinations may be used to meet all the requirements for testing different materials.

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

General guidance is given in ISO 16474-1.

NOTE Xenon-arc exposures for plastics are described in ISO 4892-2.

### 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 4618, *Paints and varnishes — Terms and definitions*

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

ISO 16474-1, *Paints and varnishes — Methods of exposure to laboratory light sources — Part 1: General guidance*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 and the following apply.

#### 3.1 radiant exposure

*H*

amount of radiant energy to which a test panel has been exposed

Note 1 to entry: Radiant exposure is given by the equation  $H = \int E \cdot dt$ .