DIN EN ISO 16474-1:2014-03 (E)

Paints and varnishes - Methods of exposure to laboratory light sources - Part 1: General guidance (ISO 16474-1:2013)

Contents

Page

Foreword 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Principle 6
4.1 General 6
4.2 Significance 6
4.3 Use of accelerated tests with laboratory light sources 8

5 Requirements for laboratory exposure devices 8
5.1 Irradiance 8
5.2 Temperature 10
5.3 Humidity and wetting 12
5.4 Other requirements for the exposure device 13

6 Test specimens -- Preparation, replicates, storage and conditioning 13
6.1 Handling of test specimens 13
6.2 Form, shape, preparation 13
6.3 Number of test specimens 14
6.4 Storage and conditioning 14

7 Test conditions and procedure 15
7.1 Set points for exposure conditions 15
7.2 Property measurements on test specimens 15

8 Periods of exposure and evaluation of test results 16
8.1 General 16
8.2 Sampling 16
8.3 Determination of changes in properties after exposure 16
8.4 Use of control materials 16
8.5 Use of results in specifications 16

9 Test report 17

Annex A (informative) Procedure for measuring the irradiance uniformity in the specimen exposure area 19

Annex B (informative) Factors that decrease the degree of correlation between artificial accelerated weathering or artificial accelerated irradiation exposures and actualuse exposures 22

Annex C (informative) Solar spectral irradiance standard 25

Bibliography 26