

### Anodická oxidácia hliníka a jeho zliatin Stanovenie komparatívnej stálosti farebných anodických oxidových povlakov na ultrafialové svetlo a teplo (ISO 6581:2018)

STN EN ISO 6581

42 4305

Anodizing of aluminium and its alloys - Determination of the comparative fastness to ultraviolet light and heat of coloured anodic oxidation coatings (ISO 6581:2018)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/19

Obsahuje: EN ISO 6581:2018, ISO 6581:2018

Oznámením tejto normy sa ruší STN EN ISO 6581 (42 4305) z januára 2011

### EUROPEAN STANDARD NORME EUROPÉENNE

### **EN ISO 6581**

**EUROPÄISCHE NORM** 

September 2018

ICS 25.220.20

Supersedes EN ISO 6581:2010

### **English Version**

### Anodizing of aluminium and its alloys - Determination of the comparative fastness to ultraviolet light and heat of coloured anodic oxidation coatings (ISO 6581:2018)

Anodisation de l'aluminium et de ses alliages -Détermination de la solidité comparée à la lumière ultraviolette et à la chaleur des couches anodiques colorées (ISO 6581:2018) Anodisieren von Aluminium und Aluminiumlegierungen - Vergleichsbestimmung der Beständigkeit von gefärbten, anodisch erzeugten Oxidschichten gegen ultraviolettes Licht und Wärme (ISO 6581:2018)

This European Standard was approved by CEN on 20 September 2018.

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 CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

### EN ISO 6581:2018 (E)

Contents	Page
European foreword	3

EN ISO 6581:2018 (E)

### **European foreword**

This document (EN ISO 6581:2018) has been prepared by Technical Committee ISO/TC 79 "Light metals and their alloys" in collaboration with Technical Committee CEN/TC 132 "Aluminium and aluminium alloys" the secretariat of which is held by AFNOR.

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 March 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 6581:2010.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of ISO 6581:2018 has been approved by CEN as EN ISO 6581:2018 without any modification.

## INTERNATIONAL STANDARD

ISO 6581

Third edition 2018-08

Anodizing of aluminium and its alloys — Determination of the comparative fastness to ultraviolet light and heat of coloured anodic oxidation coatings

Anodisation de l'aluminium et de ses alliages — Détermination de la solidité comparée à la lumière ultraviolette et à la chaleur des couches anodiques colorées



ISO 6581:2018(E)



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

### ISO 6581:2018(E)

Coı	ntent	ts	Page
Fore	word		iv
Intro	oductio	on	v
1	Scope		1
2	Normative references		1
3	Terms and definitions		1
4	Prin	1ciple	1
5		General Cabinet Ultraviolet light source	
6	Test 6.1 6.2 6.3 6.4	t specimen Sampling Size Treatment before testing Specimen arrangement	2 2
7	Proc 7.1 7.2 7.3	cedure  General  Standard specimens for control purposes  Effect of ozone production	
8	Expression of results		3
9	Test report		3

ISO 6581:2018(E)

### **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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <a href="www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 2, *Organic and anodic oxidation coatings on aluminium*.

This third edition cancels and replaces the second edition (ISO 6581:2010), which has been technically revised to add information about the test specimen.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 6581:2018(E)

### Introduction

The test described in this document represents severe exposure to ultraviolet light and, because of its severity, provides a very rapid determination of the comparative light-fastness of coloured anodic oxidation coatings.

It has to be realized, however, that the light emitted by the mercury vapour source used in the test has a discontinuous spectrum and a high content of ultraviolet radiation. Therefore, care is taken when comparing the results of this test with the results of exposure to sunlight.

Considerable heat is generated by the light source and so the test is carried out in such a way that the temperature of the test specimens during the test does not exceed 100 °C.

# Anodizing of aluminium and its alloys — Determination of the comparative fastness to ultraviolet light and heat of coloured anodic oxidation coatings

### 1 Scope

This document specifies a comparative method for the determination of the fastness of coloured anodic oxidation coatings to ultraviolet (UV) light and heat.

The method is not suitable for testing coloured anodic oxidation coatings that are heat sensitive.

NOTE Dark-coloured test specimens will normally reach the highest temperatures.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7583, Anodizing of aluminium and its alloys — Terms and definitions

koniec náhľadu – text ďalej pokračuje v platenej verzii STN