



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 12373-1:2001

ICS 25.220.20

77.120.10

**ALUMINIUM AND ALUMINIUM ALLOYS -  
ANODISING -  
PART 1: METHOD FOR SPECIFYING  
DECORATIVE AND PROTECTIVE ANODIC  
OXIDATION COATINGS ON ALUMINIUM**

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EUROPEAN STANDARD  
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May 2001

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English version

**Aluminium and aluminium alloys - Anodizing - Part 1: Method for  
specifying decorative and protective anodic oxidation coatings  
on aluminium**

Aluminium et alliages d'aluminium - Anodisation - Partie 1:  
Méthode de spécification des caractéristiques des  
revêtements décoratifs et protecteurs obtenus par  
oxydation anodique sur aluminium

Aluminium und Aluminiumlegierungen - Anodisieren - Teil  
1 Methode zur Spezifizierung dekorativer und schützender  
anodisch erzeugter Oxidschichten auf Aluminium

This European Standard was approved by CEN on 20 April 2001

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.

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<b>Contents</b>	<b>Page</b>
Foreword.....	3
1        Scope .....	5
2        Normative references.....	5
3        Terms and definitions .....	7
4        Information to be supplied by the purchaser to the anodizer.....	9
5        Tests.....	12
6        Coating thickness.....	12
7        Quality of sealing.....	14
8        Quality of cold impregnation.....	15
9        Appearance and colour .....	15
10       Corrosion resistance .....	16
11       Abrasion resistance .....	16
12       Resistance to cracking by deformation.....	16
13       Fastness to light and to ultraviolet radiation.....	16
14       Light reflection properties .....	17
15       Electric breakdown potential .....	19
16       Continuity of the coating .....	19
17       Mass per unit area (surface density) of the coating .....	19
Annex A (informative) Guide to grades of aluminium for anodizing .....	20
Annex B (informative) Guidance on surface preparation.....	22
Annex C (normative) Interpretation of average and local thickness requirements .....	24
Annex D (informative) Guidance on the choice of coating thickness class .....	25
Annex E (informative) Guidance on cleaning materials for external architectural applications.....	26
Bibliography .....	27

## Foreword

This European Standard has been prepared by 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 November 2001, and conflicting national standards shall be withdrawn at the latest by November 2001.

In this standard, annex C is normative and annexes A, B, D and E are informative.

EN 12373, Aluminium and aluminium alloys – Anodizing, comprises the following parts:

- Part 1: Method for specifying decorative and protective anodic oxidation coatings on aluminium
- Part 2: Determination of mass per unit area (surface density) of anodic oxidation coatings – Gravimetric method
- Part 3: Determination of thickness of anodic oxidation coatings – Non-destructive measurement by split beam microscope
- Part 4: Estimation of loss of absorptive power of anodic oxidation coatings after sealing by dye spot test with prior acid treatment
- Part 5: Assessment of quality of sealed anodic oxidation coatings by measurement of admittance
- Part 6: Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution without prior acid treatment
- Part 7: Assessment of quality of sealed anodic oxidation coatings by measurement of the loss of mass after immersion in phosphoric acid/chromic acid solution with prior acid treatment
- Part 8: Determination of the comparative fastness to ultra-violet light and heat of coloured anodic oxidation coatings
- Part 9: Measurement of wear resistance and wear index of anodic oxidation coatings using an abrasive wheel wear test apparatus
- Part 10: Measurement of mean specific abrasion resistance of anodic oxidation coatings using an abrasive jet test apparatus
- Part 11: Measurement of specular reflectance and specular gloss of anodic oxidation coatings at angles of 20°, 45°, 60° or 85°
- Part 12: Measurement of reflectance characteristics of aluminium surfaces using integrating-sphere instruments
- Part 13: Measurement of reflectivity characteristics of aluminium surfaces using a goniophotometer or an abridged goniophotometer
- Part 14: Visual determination of image clarity of anodic oxidation coatings – Chart scale method
- Part 15: Assessment of resistance of anodic oxidation coatings to cracking by deformation

Page 4

EN 12373-1:2001

Part 16: Check for continuity of thin anodic oxidation coatings – Copper sulfate test

Part 17: Determination of electric breakdown potential

Part 18: Rating system for the evaluation of pitting corrosion – Chart method

Part 19: Rating system for the evaluation of pitting corrosion – Grid method

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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