This is a free page sample. Access the full version online.

National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 546-4:2007

ICS 77.150.10

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
http://www.nsai.ie

Sales
http://www.standards.ie

ALUMINIUM AND ALUMINIUM ALLOYS - FOIL - PART 4: SPECIAL PROPERTY REQUIREMENTS

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:

16 February 2007

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© **NSAI 2007**

Price Code F

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 546-4

December 2006

ICS 77.150.10

Supersedes EN 546-4:1997

English Version

Aluminium and aluminium alloys - Foil - Part 4: Special property requirements

Aluminium et alliages d'aluminium - Feuille mince - Partie 4 : Exigences de propriétés particulières

Aluminium und Aluminiumlegierungen - Folien - Teil 4: Besondere Eigenschaftsanforderungen

This European Standard was approved by CEN on 25 November 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2006 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 546-4:2006: E

This is a free page sample. Access the full version online.

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Application of special property testing 4

5 Porosity 5
5.1 Test principle 5
5.2 Test method 5
5.3 Acceptance values 6
5.4 Sampling and frequency of testing 6

6 Wettability 6
6.1 Test principle 6
6.2 General test conditions 6
6.3 Test procedures 7
6.4 Frequency of testing 10

7 Stickiness 10
7.1 Test principle 10
7.2 Test method 10
7.3 Acceptance criteria 11
7.4 Frequency of testing 11

8 Burst strength 11

9 Erichsen cupping test 12
9.1 Test principle 12
9.2 Test method 12
9.3 Acceptance criteria 12
9.4 Frequency of testing 12

Bibliography 13

Table

Table 1 — Applicability of special property tests to product group 5

This is a free page sample. Access the full version online.

Foreword

This document (EN 546-4:2006) 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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

This document supersedes EN 546-4:1997.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 6 "Foil and finstock" to revise EN 546-4:1997.

The following modifications have been made:

— Clause 3: reference to EN 12258-1:1998 has been added, the definition of perforation has been deleted;

— Clause 4: Table 1: limitation of pinholes (6 μm to 20 μm) detection range for light gauge converter double roller (6 μm to 70 μm) has been deleted;

— Clause 6: addition of test by use of Cotton Wool Pad (6.3.4);

— Figure 3 second Figure has been added.

EN 546 comprises the following parts under the general title "*Aluminium and aluminium alloys - Foil":*

— *Part 1: Technical conditions for inspection and delivery*

— *Part 2: Mechanical properties*

— *Part 3: Tolerances on dimensions*

— *Part 4: Special property requirements*

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.

CEN/TC 132 affirms it is its policy that in the case when a patentee refuses to grant licenses on standardised standard products under reasonable and not discriminatory conditions, then this product shall be removed from the corresponding standard.

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

This is a free page sample. Access the full version online.

1 Scope

This document specifies the requirements for special properties of wrought aluminium and wrought aluminium alloy foil and their tests. It applies to flat rolled products.

It does not apply to lacquered, painted, embossed or laminated products.

The technical conditions for inspection and delivery of foil are specified in EN 546-1.

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.

EN 12258-1:1998, *Aluminium and aluminium alloys — Terms and definitions — Part 1: General terms*

EN ISO 20482, *Metallic materials — Sheet and strip — Erichsen cupping test (ISO 20482:2003)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12258-1:1998 and the following apply.

3.1
pinholes (foil)
randomly distributed voids in foil of gauge 6 μm to 20 μm of normally round or oval shape with a maximum diameter < 0,2 mm

3.2
roll holes (foil)
voids with a maximum diameter > 0,2 mm which occur at regular intervals throughout the rolled coil length

4 Application of special property testing

The applicability of tests for special properties of foil products is given in Table 1.

The tests shall only be carried out when agreed between supplier and purchaser and stated on the order.

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation