

**Alumiinium ja alumiiniumisulamid.  
Valtstooted taara, sulgurite ja kaante  
valmistamiseks. Tehnilised nõuded**

Aluminium and aluminium alloys - Rolled products  
for cans, closures and lids - Specifications

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 541:2007 sisaldab Euroopa standardi EN 541:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 541:2007 consists of the English text of the European standard EN 541:2006.</p> <p>This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p><b>Käsitlusala:</b> See Euroopa standard määrab kindlaks tehnilised kontrolli- ja tarnetingimused, mehaanilised omadused, mõõtmeterantsid ja teised nõuded nende valtsuodete kohta, mis on saadud deformeeritavast alumiiniumist ja deformeeritavatest alumiiniumisulamitest ning mille paksus on 0,150 mm kuni 0,500 mm. Nimetatud valtsuodet on ette nähtud taara, sulgurite, kaante ja katete valmistamiseks.</p>	<p><b>Scope:</b> This document specifies the technical conditions for inspection and delivery, mechanical properties, dimensional tolerances and other requirements for rolled products made from wrought aluminium and wrought aluminium alloys with thicknesses from 0,150 mm to 0,500 mm for manufacturing rigid cans, closures, lids and tabs.</p>
---	--

ICS 77.150.10

**Võtmesõnad:** alumiinium, alumiiniumisulamid, kaardumine, kastid (konteinerid), katted, kolud (konteinerid), kontroll, mehaanilised omadused, mõõtmeterantsid, märgistus, pinna kvaliteet, tarnimine, tõmbeteimid, valtsuodet

English Version

## Aluminium and aluminium alloys - Rolled products for cans, closures and lids - Specifications

Aluminium et alliages d'aluminium - Produits laminés pour  
boîtes, capsules rigides et couvercles - Spécifications

Aluminium und Aluminiumlegierungen - Walzerzeugnisse  
für Dosen, Verschlüsse und Deckel - Spezifikationen

This European Standard was approved by CEN on 16 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

# Contents

Page

Foreword.....	3
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Terms and definitions .....</b>	<b>4</b>
<b>4 Technical conditions for inspection and delivery .....</b>	<b>5</b>
<b>5 Mechanical properties .....</b>	<b>9</b>
<b>6 Tolerances on dimensions and form .....</b>	<b>13</b>
<b>7 Surface finish .....</b>	<b>17</b>
<b>8 Inspection documents.....</b>	<b>18</b>
<b>9 Labelling .....</b>	<b>18</b>
<b>10 Packaging .....</b>	<b>19</b>
<b>11 Arbitration.....</b>	<b>19</b>
<b>Annex A (normative) List of aluminium and aluminium alloys .....</b>	<b>20</b>
<b>Annex B (normative) Rules for rounding.....</b>	<b>21</b>
<b>Annex C (informative) Temper designations .....</b>	<b>22</b>
<b>Annex D (normative) Chemical composition of aluminium alloy EN AW-5006 .....</b>	<b>23</b>
<b>Bibliography .....</b>	<b>24</b>

## Foreword

This document (EN 541:2006) 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 541:1995.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 7 "Sheet, strip and plates" to revise EN 541:1995.

The following technical changes have been made:

- General: Normative references updated
- Table 1: New alloy added — EN AW-5006
- Clause 8: Amended
- Annex D: Added
- Bibliography: Added

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 licences 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.

## 1 Scope

This document specifies the technical conditions for inspection and delivery, mechanical properties, dimensional tolerances and other requirements for rolled products made from wrought aluminium and wrought aluminium alloys with thicknesses from 0,150 mm to 0,500 mm for manufacturing rigid cans, closures, lids and tabs.

## 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 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition*

EN 602, *Aluminium and aluminium alloys — Wrought products — Chemical composition of semi-finished products used for the fabrication of articles for use in contact with foodstuff*

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature*

EN 10204, *Metallic products — Types of inspection documents*

EN 14242, *Aluminium and aluminium alloys — Chemical analysis — Inductively coupled plasma optical emission spectral analysis*

EN 14361, *Aluminium and aluminium alloys — Chemical analysis — Sampling from metal melts*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1 sheet

flat rolled product of rectangular cross section with uniform thickness, supplied in straight lengths (i.e. flat) with trimmed edges

### 3.2 length of sheet

length is always the dimension in the rolling direction

### 3.3 width of sheet

width is always the dimension at right angles to the rolling direction

NOTE See 6.2.2, Figure 1.

### 3.4 strip

flat rolled product of rectangular cross section with uniform thickness, supplied in coils usually with trimmed edges

NOTE Strip is sometimes called "coil".