

**Aluminium and aluminium alloys -  
Castings - Chemical composition of  
castings for use in contact with food**

Aluminium and aluminium alloys - Castings -  
Chemical composition of castings for use in contact  
with food

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 601:2004 sisaldab Euroopa standardi EN 601:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.08.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 601:2004 consists of the English text of the European standard EN 601:2004.</p> <p>This document is endorsed on 27.08.2004 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> This European Standard specifies the maximum percentage content of alloying elements and impurities in aluminium and aluminium alloy cast materials and articles designed to be in contact with food and contains provisions for the demonstration of conformity of products with the present standard.</p>	<p><b>Scope:</b> This European Standard specifies the maximum percentage content of alloying elements and impurities in aluminium and aluminium alloy cast materials and articles designed to be in contact with food and contains provisions for the demonstration of conformity of products with the present standard.</p>
--	--

**ICS** 67.250, 77.150.10

**Võtmesõnad:** aluminium, castings, chemical composition, cooking appliances, definitions, food- container c, impurities, mass concentration, materials in contact with food, maximum value, metals, non ferrous alloys, non-ferrous metals, specification (approval), specifications

English version

## Aluminium and aluminium alloys - Castings - Chemical composition of castings for use in contact with foodstuff

Aluminium et alliages d'aluminium - Pièces moulées -  
Composition chimique des pièces moulées destinées à  
entrer en contact avec les denrées alimentaires

Aluminium und Aluminiumlegierungen - Gussstücke -  
Chemische Zusammensetzung von Gussstücken, die in  
Kontakt mit Lebensmitteln kommen

This European Standard was approved by CEN on 2 February 2004.

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, 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

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions.....	4
4 Maximum permissible content of elements for foodstuff application.....	5
4.1 Cast aluminium .....	5
4.2 Cast aluminium alloys .....	5
5 Selection of cast aluminium and aluminium alloys.....	6
6 Demonstration of conformity with the present standard .....	7

## Foreword

This document (EN 601:2004) 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 October 2004, and conflicting national standards shall be withdrawn at the latest by October 2004.

Within its programme of work, Technical Committee CEN/TC 132 has entrusted CEN/TC 132 WG 9 "*Aluminium and aluminium alloy cast and wrought products in contact with food*" to prepare a revision of the following standard :

EN 601, *Aluminium and aluminium alloys — Castings — Chemical composition of castings for use in contact with food.*

This revision consists mainly in the addition of a new clause 6.

This document supersedes EN 601:1994.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## 1 Scope

This European Standard specifies the maximum mass content of alloying elements and impurities in aluminium and aluminium alloy cast materials and articles designed to be in contact with foodstuff. It contains provisions for the demonstration of conformity of products with the present standard.

NOTE 1 Materials include ingots and liquid metal. Articles are finished goods.

NOTE 2 Some of the products listed in the present standard can be subject to patent or patent applications, and their listing herein does not in anyway imply the granting of a licence under such patent right.

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

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1706, *Aluminium and aluminium alloys — Castings — Chemical composition and mechanical properties.*

EN 10204:1991, *Metallic products — Types of inspection documents.*

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

## 3 Terms and definitions

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

### 3.1

#### aluminium

metal with a minimum content of 99,0 % by mass of aluminium, provided that the content by mass of any other element does not exceed the limit specified in Table 1

**Table 1 — Aluminium - Other elements**

Element	Maximum content % (by mass)
Iron + Silicon	1,0
Copper	0,10 (if Cr and / or Mn $\geq$ 0,05) 0,20 (if Cr < 0,05 and Mn < 0,05)
Other elements <sup>a</sup> each	0,10
<sup>a</sup> Other elements are for example, Cr, Mg, Mn, Ni, Zn.	