

Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 573-3:2019 sisaldab Euroopa standardi EN 573-3:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 573-3:2019 consists of the English text of the European standard EN 573-3:2019.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 28.08.2019.	Date of Availability of the European standard is 28.08.2019.
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English Version

## Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products

Aluminium et alliages d'aluminium - Composition  
chimique et forme des produits corroyés - Partie 3 :  
Composition chimique et forme des produits

Aluminium und Aluminiumlegierungen - Chemische  
Zusammensetzung und Form von Halbzeug - Teil 3:  
Chemische Zusammensetzung und Erzeugnisformen

This European Standard was approved by CEN on 7 July 2019.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## European foreword

This document (EN 573-3:2019) 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of an identical text or by endorsement, at the latest by February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

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 will supersede EN 573-3:2013.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 5 “Extruded and drawn products” to revise EN 573-3:2013.

CEN/TC 132 has decided to revise this document as follows:

- addition of the alloy EN AW-2016 in Table 2 and A.2;
- addition of the alloy EN AW-4025 in Tables 4 and A.4;
- addition of the alloy EN AW-6050 in Tables 6 and A.6;
- addition of the alloy EN AW-5018B in Tables 5 and A.5;
- addition of the alloy EN AW-8026 in Table 8 and A.8;
- correction of the alloy EN AW-5449 in Table 5;
- correction of the alloy EN AW-6064A in Table 6;
- modification of the order of alloys to conform with Aluminium Association System.

EN 573 comprises the following parts under the general title *Aluminium and aluminium alloys — Chemical composition and form of wrought products*:

- *Part 1: Numerical designation system*;
- *Part 2: Chemical symbol based designation system*;
- *Part 3: Chemical composition and form of products*;
- *Part 4: Forms of products*;
- *Part 5: Codification of standardized wrought products*.

CEN/TC 132 affirms its policy that if a patentee refuses to grant licenses on standardized products under reasonable and not discriminatory conditions, this product will be removed from the corresponding document.

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

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## 1 Scope

This document specifies the chemical composition limits of wrought aluminium and wrought aluminium alloys and form of products.

NOTE The chemical composition limits of aluminium and aluminium alloys specified herein are completely identical with those registered with the Aluminium Association, 1525, Wilson Boulevard, Suite 600, Arlington, VA 22209, USA, for the corresponding alloys.

## 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.

EN 485-2, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 2: Mechanical properties*

EN 541, *Aluminium and aluminium alloys — Rolled products for cans, closures and lids — Specifications*

EN 546-2, *Aluminium and aluminium alloys — Foil — Part 2: Mechanical properties*

EN 570, *Aluminium and aluminium alloys — Impact extrusion slugs obtained from wrought products — Specification*

EN 573-2, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 2: Chemical symbol based designation system*

EN 586-2, *Aluminium and aluminium alloys — Forgings — Part 2: Mechanical properties and additional property requirements*

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 603-2, *Aluminium and aluminium alloys — Wrought forging stock — Part 2: Mechanical properties*

EN 683-2, *Aluminium and aluminium alloys — Finstock — Part 2: Mechanical properties*

EN 754-2, *Aluminium and aluminium alloys — Cold drawn rod/bar and tube — Part 2: Mechanical properties*

EN 755-2, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 2: Mechanical properties*

EN 1301-2, *Aluminium and aluminium alloys — Drawn wire — Part 2: Mechanical properties*

EN 1592-2, *Aluminium and aluminium alloys — HF seam welded tubes — Part 2: Mechanical properties*

EN 1715-2, *Aluminium and aluminium alloys — Drawing stock — Part 2: Specific requirements for electrical applications*

EN 1715-3, *Aluminium and aluminium alloys — Drawing stock — Part 3: Specific requirements for mechanical uses (excluding welding)*

EN 1715-4, *Aluminium and aluminium alloys — Drawing stock — Part 4: Specific requirements for welding applications*

### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

### 4 Chemical composition limits

The chemical composition of aluminium and aluminium alloys is specified in percentage by mass in Tables 1 to 8. Limits of impurities are expressed as a maximum; limits of alloying elements shown as a range. Aluminium is specified as a minimum for unalloyed aluminium, and as a remainder for aluminium alloys.

The chemical composition of internationally registered wrought aluminium and wrought aluminium alloys not listed in this document can be found in Teal sheet [1].

Analysis shall be made for elements which are specified, for example Pb, Sn, Bi, Sb, Zr.

### 5 Writing rules

5.1 Standard limits for alloying elements and impurities are expressed in percentage by mass to the following decimal places:

— less than 0,001 %	0,000X;
— 0,001 % but less than 0,01 %	0,00X;
— 0,01 % but less than 0,10 %:	
— unalloyed aluminium made by a refining process	0,0XX;
— others	0,0X;
— 0,10 % to 0,55 %	0,XX;
— over 0,55 %	0,X; X,X; XX,X.

Exception: combined Si + Fe limits for 1xxx designations shall be expressed as 0,XX or 1,XX.

5.2 The aluminium content for unalloyed aluminium made by a refining process is the difference between 100,00 % and the sum of all other metallic elements present in amounts of 0,001 0 % or more each, expressed to the third decimal place before determining the sum, which is rounded to the second decimal place before subtracting.

For unalloyed aluminium not made by a refining process, the aluminium content is the difference between 100,00 % and the sum of all other metallic elements present in amounts of 0,010 % or more each expressed to the second decimal place before determining the sum.