

SLOVENSKI STANDARD oSIST prEN 573-3:2025

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Aluminij in aluminijeve zlitine - Kemična sestava in oblika gnetenih izdelkov - 3. del: Kemična sestava in oblika izdelkov

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

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

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

Ta slovenski standard je istoveten z: prEN 573-3

ICS:

77.040.30 Kemijska analiza kovin Chemical analysis of metals

77.150.10 Aluminijski izdelki Aluminium products

oSIST prEN 573-3:2025 en,fr,de

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<u>oSIST prEN 573-3:2025</u>

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN 573-3

March 2025

ICS 77.120.10; 77.150.10

Will supersede EN 573-3:2019+A2:2023

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 draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 132.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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prEN 573-3:2025 (E)

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European foreword

This document prEN 573-3:2025 has been prepared by Technical Committee CEN/TC 132 "Aluminium and aluminium alloys", the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 573-3:2019+A2:2023.

prEN 573-3:2025 includes the following significant technical changes with respect to EN 573-3:2019+A2:2023:

- addition of the alloy EN AW-2007C in Table 2 and A.2;
- addition of the alloy EN AW-2033 in Table 2 and A.2;
- addition of the alloy EN AW-2077 in Table 2 and A.2;
- addition of the alloy EN AW-2079 in Table 2 and A.2;
- addition of the alloy EN AW-6035 in Tables 6 and A.6;
- addition of the alloy EN AW-6084 in Tables 6 and A.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; _463d_90a2-aftafed6d0cc/osist-pren-573-3-2025
- Part 3: Chemical composition and form of products;
- Part 4: Forms of products;
- Part 5: Codification of standardized wrought products.

prEN 573-3:2025 (E)

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

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

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 terminology databases for use in standardization at the following addresses:

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

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 [2].

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 %: OSIST prEN 573-3:2025 | |
| | unalloyed aluminium made by a refining 6-463d process | 0,0XX ; flafed6d0cc/osist-pren-573-3-2025 |
| | — 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.