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Aluminium and aluminium alloys - Chemical analysis - Inductively coupled plasma optical emission spectrometric analysis

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Aluminium and aluminium alloys - Chemical analysis - Inductively coupled plasma optical emission spectrometric analysis

Aluminium et alliages d'aluminium - Analyse chimique - Analyse par spectrométrie d'émission optique avec source à plasma induit par haute fréquence

Aluminium und Aluminiumlegierungen - Chemische Analyse - Optische Emissionsspektrometrie mit induktiv gekoppeltem Plasma

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

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European foreword

This document (EN 14242:2023) 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of an identical text or by endorsement, at the latest by September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

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 supersedes EN 14242:2004.

The main changes compared to the previous edition are listed below:

— modification of the title and Scope;

— new subclause 5.15.6;

— several editorial modifications.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document specifies an inductively coupled plasma optical emission spectrometric method (ICP-OES) for the analysis of aluminium and aluminium alloys.

This method is applicable to the determination of silicon, iron, copper, manganese, magnesium, chromium, nickel, zinc, titanium, gallium, vanadium, beryllium, bismuth, calcium, cadmium, cobalt, lithium, sodium, lead, antimony, tin, strontium and zirconium in aluminium and aluminium alloys.

The content of the elements to be determined should be at least 10 times higher than the corresponding detection limits.

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 12258-2:2004, *Aluminium and aluminium alloys - Terms and definitions - Part 2: Chemical analysis*

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

EN ISO 648, *Laboratory glassware - Single-volume pipettes (ISO 648)*

EN ISO 1042, *Laboratory glassware - One-mark volumetric flasks (ISO 1042)*

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*