ICS 77.040.30 SLOVENSKÁ TECHNICKÁ NORMA Január 2020

| STN | **Ocele<br>Stanovenie obsahu olova<br>Metóda plameňovej atómovej absorpčnej spektrometrie (FAAS)** | **STN<br>EN 10181<br><br>42 0536** |
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Steels - Determination of lead content - Flame atomic absorption spectrometric method (FAAS)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/19

Obsahuje: EN 10181:2019

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# EUROPEAN STANDARD
# NORME EUROPÉENNE
# EUROPÄISCHE NORM

# EN 10181

June 2019

ICS 77.040.30 Supersedes EN 10181:1989

English Version

# Steels - Determination of lead content - Flame atomic absorption spectrometric method (FAAS)

Aciers - Détermination de la teneur en plomb - Méthode par spectrométrie d'absorption atomique dans la flamme (SAAF)

Stahl - Bestimmung des Bleianteils - Flammenatomabsorptionsspektrometrisches Verfahren (FAAS)

This European Standard was approved by CEN on 22 April 2019.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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# Contents

Page

## European foreword

This document (EN 10181:2019) has been prepared by Technical Committee CEN/TC 459 "ECISS - European Committee for Iron and Steel Standardization"[1], 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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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 10181:1989.

In comparison with EN 10181:1989, the following significant technical changes were made:

— Clause 1: lower limit of the scope changed;

— Normative references: revised;

— Clause 4: possibility for using aqua regia for the dissolution and other suitable radiation sources added;

— Clause 5: preparation of lead standard solution, 0,05 g/l and iron base solution added;

— 8.3.2: calibration solutions expanded;

— 8.3.3: background correction specified;

— 8.3.4 and Clause 9: bracketing method for the spectrometric measurements added;

— Clause 10: editorially updated;

— Bibliography: added.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

[1] Through its subcommittee SC 2 "Methods of chemical analysis for iron and steel" (secretariat: SIS)

## 1 Scope

This document specifies a flame atomic absorption spectrometric method (FAAS) for the determination of lead content in non-alloy and low alloy steels.

The method is applicable to lead contents between 0,005 % (weight percent) and 0,5 % (weight percent).

The method can be adapted to lower or higher lead contents by changing the test portion or the dilution process, provided the criteria in 6.2.2 and 6.2.3 are still met.

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

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

EN ISO 14284, *Steel and iron — Sampling and preparation of samples for the determination of chemical composition (ISO 14284)*