

STN	Skúšanie keramických materiálov Stanovenie síry v neoxidických keramických surovinách a keramických materiáloch Časť 2: Atómová emisná spektrometria s indukčne viazanou plazmou (ICP-OES) alebo ionovou chromatografiou (IC) po spálení v prúde kyslíka (ISO 14720-2: 2026)	STN EN ISO 14720-2 72 1075
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Testing of ceramic materials - Determination of sulfur in non-oxidic ceramic raw materials and ceramic materials - Part 2: Inductively coupled plasma optical emission spectrometry (ICP-OES) or ion chromatography (IC) after burning in the oxygen flow (ISO 14720-2:2026)

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. 05/26

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NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 14720-2

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Supersedes EN ISO 14720-2:2013

English Version

**Testing of ceramic materials - Determination of sulfur in
non-oxidic ceramic raw materials and ceramic materials -
Part 2: Inductively coupled plasma optical emission
spectrometry (ICP-OES) or ion chromatography (IC) after
burning in the oxygen flow (ISO 14720-2:2026)**

Analyse des matériaux céramiques - Dosage du soufre
dans les produits et les matières premières céramiques
non oxydes - Partie 2: Spectrométrie d'émission
optique par plasma à couplage inductif (ICP-OES) ou
chromatographie ionique (IC) après combustion dans
le courant d'oxygène (ISO 14720-2:2026)

Prüfung keramischer Werkstoffe - Bestimmung des
Schwefelgehaltes in nichtoxidischen keramischen Roh-
und Werkstoffen - Teil 2: Optische
Emissionsspektrometrie mit induktiv gekoppeltem
Plasma (ICP-OES) oder Ionenchromatographie (IC)
nach Verbrennung im Sauerstoffstrom (ISO 14720-
2:2026)

This European Standard was approved by CEN on 28 February 2026.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 14720-2:2026 (E)

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European foreword

This document (EN ISO 14720-2:2026) has been prepared by Technical Committee ISO/TC 33 "Refractories" in collaboration with Technical Committee CEN/TC 187 "Refractory products and materials" the secretariat of which is held by BSI.

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 2026, and conflicting national standards shall be withdrawn at the latest by September 2026.

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.

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Endorsement notice

The text of ISO 14720-2:2026 has been approved by CEN as EN ISO 14720-2:2026 without any modification.



International Standard

ISO 14720-2

Testing of ceramic materials — Determination of sulfur in non- oxidic ceramic raw materials and ceramic materials —

Part 2: Inductively coupled plasma optical emission spectrometry (ICP-OES) or ion chromatography (IC) after burning in the oxygen flow

Analyse des matériaux céramiques — Dosage du soufre dans les produits et les matières premières céramiques non oxydes —

Partie 2: Spectrométrie d'émission optique par plasma à couplage inductif (ICP-OES) ou chromatographie ionique (IC) après combustion dans le courant d'oxygène

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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ISO 14720-2:2026(en)**Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 33, *Refractories*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 187, *Refractory products and materials*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 14720-2:2013), which has been technically revised.

The main changes are as follows:

- title of this document revised to better describe its field of application;
- [Clause 1](#) adapted to the new title;
- [subclause 9.3](#) provides additional information on suitable sulfur emission lines;
- in [9.3](#), [9.4](#), [11.1](#) and [11.2](#), NOTES were transferred into normative paragraphs;
- [subclause 11.1](#) provides additional information on blank measurement;
- in [11.2](#), the error in the analysis process regarding the extraction of the residue after combustion has been corrected;
- in [Clause 12](#), symbols for variables have been revised according to ISO/IEC requirements.

A list of all parts in the ISO 14720 series can be found on the ISO website.

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Testing of ceramic materials — Determination of sulfur in non-oxidic ceramic raw materials and ceramic materials —

Part 2:

Inductively coupled plasma optical emission spectrometry (ICP-OES) or ion chromatography (IC) after burning in the oxygen flow

1 Scope

This document specifies a method for the determination of sulfur in non-oxidic ceramic raw materials and ceramic materials, which are completely oxidized at a higher temperature in an oxygen atmosphere, e.g. carbon and graphite materials.

For materials which are not completely oxidizable under these conditions, it is possible to determine sulfur that can be released under these conditions, e.g. the adherent sulfur.

This document is applicable for materials with mass fractions of sulfur ≤ 10 % and mass fractions of ash < 20 %, The defined method is limited for materials with mass fractions of barium < 10 mg/kg, because the sulfur bonded in barium sulfate is not detectable with this method.

For the lower detection limit of this method, a mass fraction of sulfur of 0,5 mg/kg in the case of inductively coupled plasma optical emission spectrometry (ICP-OES) and 5 mg/kg in the case of ion chromatography (IC) can be considered as a practical value.

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.

ISO 10304-1, *Water quality — Determination of dissolved anions by liquid chromatography of ions — Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulfate*

ISO 11885, *Water quality — Determination of selected elements by inductively coupled plasma optical emission spectrometry (ICP-OES)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN