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Solid mineral fuels — Determination of chlorine content

Combustibles minéraux solides — Dosage de la teneur en chlore

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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 5, *Methods of analysis*.

This first edition cancels and replaces ISO/TS 18806:2014, which has been technically revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Solid mineral fuels — Determination of chlorine content

1 Scope

This document specifies two methods (high temperature combustion and high pressure vessel combustion) for the determination of chlorine in solid mineral fuels. It is applicable to solid mineral fuels.

The chlorine in the absorption solution can be determined using different finishes, such as coulometric or potentiometric titration, spectrophotometry or ion chromatography.

The method is applicable to determine the chlorine content higher than 0,005 % mass fraction.

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 687, *Solid mineral fuels — Coke — Determination of moisture in the general analysis test sample*

ISO 1170, *Coal and coke — Calculation of analyses to different bases*

ISO 1213-2, *Solid mineral fuels — Vocabulary — Part 2: Terms relating to sampling, testing and analysis*

ISO 5068-2, *Brown coals and lignites — Determination of moisture content — Part 2: Indirect gravimetric method for moisture in the analysis sample*

ISO 11722, *Solid mineral fuels — Hard coal — Determination of moisture in the general analysis test sample by drying in nitrogen*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1213-2 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

4.1 Method A — High temperature combustion

The sample is combusted in an oxygen atmosphere at high temperature. The gaseous combustion products collected in a trap filled with water include dissolved chloride compounds.

4.2 Method B — High pressure vessel combustion

The sample is combusted in an oxygen atmosphere in a high pressure vessel containing an absorption solution. The combustion products collected in an absorption solution include dissolved chloride compounds.

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