
**Solid mineral fuels — Determination
of carbonate carbon content —
Gravimetric method**

*Combustibles minéraux solides — Dosage du carbone sous forme de
carbonate — Méthode gravimétrique*



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Reagents	1
6 Apparatus	2
7 Preparation of the test sample	3
8 Procedure	4
8.1 Check test.....	4
8.2 Determination.....	5
8.2.1 Preparation.....	5
8.2.2 Conditioning.....	5
8.2.3 Reaction and completion.....	5
9 Expression of results	5
10 Precision	6
10.1 Repeatability limit.....	6
10.2 Reproducibility critical difference.....	6
11 Test report	7
Annex A (informative) Derivation of factors used in calculations in this document	8

Foreword

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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 documents 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 27, *Solid mineral fuels*, Subcommittee SC 5, *Methods of analysis*.

This fourth edition cancels and replaces the third edition (ISO 925:1997), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- the normative references have been updated and the dates removed;
- the references in [Clause 7](#) have been updated.

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.

Solid mineral fuels — Determination of carbonate carbon content — Gravimetric method

1 Scope

This document specifies a gravimetric method of determining the carbon in the mineral carbonates associated with solid mineral fuels.

NOTE The result obtained will include any carbon from atmospheric carbon dioxide absorbed by the fuel.

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 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*

ISO 13909-4, *Hard coal and coke — Mechanical sampling — Part 4: Coal — Preparation of test samples*

ISO 13909-6, *Hard coal and coke — Mechanical sampling — Part 6: Coke — Preparation of test samples*

ISO 18283, *Hard coal and coke — Manual sampling*

3 Terms and definitions

No terms and definitions are listed in this document.

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

A known mass of sample is treated with hydrochloric acid, which reacts with the carbonates present to liberate carbon dioxide. The carbon dioxide resulting from the decomposition of the carbonates is absorbed and weighed.

5 Reagents

WARNING — Care should be exercised when handling reagents, many of which are toxic and corrosive.