
Coal and coke — Calculation of analyses to different bases

*Charbon et coke — Calculs pour les analyses par rapport à
différentes bases*



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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 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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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, *Coal and coke*, Subcommittee SC 5, *Methods of analysis*.

This fourth edition cancels and replaces the third edition (ISO 1170:2013), of which it constitutes a minor revision. This edition includes the following changes compared to the previous edition:

- updating of referenced documents;
- adding Terms and Definitions to form Clause 3 “Terms, Definitions and Symbols”
- use of “mass fraction” instead of “content”;
- converting [Annex A](#) from normative to informative.

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.

Coal and coke — Calculation of analyses to different bases

1 Scope

This document gives equations that allow analytical data relating to coal and coke to be expressed on the various different bases in common use. Consideration is given to corrections that can be applied to certain determined values for coal prior to their calculation to other bases.

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 602, *Coal — Determination of mineral matter*

3 Terms, definitions and symbols

3.1 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/>

3.2 Symbols

The symbols used in the subsequent clauses are as follows, with suffixes (separated by a comma) “ad” (air-dried), “ar” (as-received), “d” (dry), “daf” (dry, ash-free) or “dmmf” (dry, mineral-matter-free) where appropriate.

w_A	ash, expressed as percent mass fraction
w_C	carbon mass fraction, expressed as percent
w_{Cl}	chlorine mass fraction, expressed as percent
$w_{Cl,inorg}$	inorganic chlorine mass fraction, expressed as percent
w_{CO_2}	carbon dioxide mass fraction, expressed as percent
w_H	hydrogen mass fraction, excluding hydrogen in the moisture, but including the hydrogen from water of hydration in minerals, expressed as percent
w_{H_2O}	moisture mass fraction, expressed as percent
w_h	water of hydration in the mineral matter mass fraction, expressed as percent
w_{MM}	mineral matter mass fraction, expressed as percent (see Annex A)
w_N	nitrogen mass fraction, expressed as percent