ISO/FDIS 1014-2:2025(en)

ISO/TC 27/SC 3/WG 1

Secretariat: SABS

Date: 2025-02-2203-26

Coke — —

Part 2:
Determination of true relative density

FDIS stage

Contents

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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 3, *Coke*.

This first edition of ISO 1014-2, together with ISO 1014-1 and ISO 1014-3, cancels and replaces ISO 1014:2021.

A list of all parts in the ISO 1014 series can be found on the ISO website.

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.

Field Code Changed

Coke — —

Part 2:
Determination of true relative density

1 Scope

This document specifies the method for determining the true relative density of coke, in relation to water.

NOTE "True relative density" varies according to the displacement liquid used.

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 13909 — 6, *Coal and coke — Mechanical sampling — Part 6: Coke — Preparation of test samples of coke*

ISO 18283, *Coal and coke — Manual sampling*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

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

4 Principle

The mass of water displaced by a known mass of dry coke, ground to pass through a 212 µm sieve, is determined using a pycnometer. Air is displaced by boiling during the determination. Distilled water is specified. Thermostatic control of the temperature is essential since a difference of 1 °C can cause an error of about 0,012 in the result.

5 Apparatus

5.1 ~~5.1~~ **Pycnometer,** 50 ml capacity (see Figure 1~~Figure 1)~~.).

5.2 ~~5.2~~ **Water bath,** with stirrer, thermostatically controlled to maintain a desired temperature θ °C to within ±1 °C.

5.3 ~~5.3~~ **Two wash bottles,** each containing about 50 ml of distilled water. One wash bottle is kept hot (80 °C to 90 °C) and the other is left in the water bath (5.2~~(5.2)~~.).

5.4 5.4 **Reflux air condenser:** a glass tube about 1 m long, of the same external diameter as the neck of the pycnometer (5.1(5.1)) with a short length of rubber tubing for attaching it to the latter.

5.5 5.5 **Glycerol bath:** a suitable vessel in which sufficient glycerol can be heated for the lower two-thirds of the pycnometer (5.1(5.1)) to be immersed.

5.6 5.6 **Analytical Balancebalance,** with a resolution of at least 0,1 % relative of the test portion mass.