

**TAHKED MINERAALSED KÜTUSED**  
**Süsiniku, vesiniku ja lämmastiku kogusisalduse**  
**määramine**  
**Instrumentaalne meetod**

**Solid mineral fuels**  
**Determination of total carbon, hydrogen and nitrogen**  
**content**  
**Instrumental method**  
**(ISO 29541:2010)**

**EESTI STANDARDI EESSÕNA**

See Eesti standard EVS-ISO 29541:2015 „Tahked mineraalsed kütused. Süsiniku, vesiniku ja lämmastiku kogusisalduse määramine. Instrumentaalne meetod“ sisaldb rahvusvahelise standardi ISO 29541:2010 „Solid mineral fuels – Determination of total carbon, hydrogen and nitrogen content – Instrumental method“ identset ingliskeelset teksti.

Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtiks on esitanud EVS/TK 1, standardi avaldamist on korraldanud Eesti Standardikeskus.

Standard EVS-ISO 29541:2015 on jõustunud sellekohase teate avaldamisega EVS Teataja 2015. aasta märtsikuu numbris.

Standard on kätesaadav Eesti Standardikeskusest.

**NATIONAL FOREWORD**

This Estonian Standard EVS-ISO 29541:2015 consists of the identical English text of the International Standard ISO 29541:2010 „Solid mineral fuels – Determination of total carbon, hydrogen and nitrogen content – Instrumental method“.

Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 1, the Estonian standard has been published by the Estonian Centre for Standardisation.

This standard has been endorsed with a notification published in the March 2015 issue of the official bulletin of the Estonian Centre for Standardisation.

The standard is available from the Estonian Centre for Standardisation.

**Käsitlusala**

See rahvusvaheline standard kirjeldab instrumentaalset meetodit kogu süsiniku, vesiniku ja lämmastiku määramiseks söes ja koksis.

**MÄRKUS** See rahvusvaheline standard on valideeritud ainult sõele vastavalt ISO 5725-1 põhimõtetele.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 29541 was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 5, *Methods of analysis*.

This first edition of ISO 29541 cancels and replaces ISO/TS 12902:2001, which has been technically revised.

## Introduction

The reliable determination of total carbon, hydrogen and nitrogen is important for engineering calculations applied to the combustion of coal. The precise and accurate determination of the carbon content of coal is essential for carbon accounting purposes.

# Solid mineral fuels — Determination of total carbon, hydrogen and nitrogen content — Instrumental method

**WARNING** — The use of this International Standard can involve hazardous materials, operations and equipment. This International Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 1 Scope

This International Standard specifies a method for the determination of total carbon, hydrogen and nitrogen in coal and coke by instrumental methods.

NOTE This International Standard has been validated for coal only in accordance with the principles of ISO 5725-1.

## 2 Normative references

The following referenced documents are indispensable for the application 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 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 5069-2, *Brown coals and lignites — Principles of sampling — Part 2: Sample preparation for determination of moisture content and for general analysis*

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

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