## INTERNATIONAL STANDARD

ISO 16993

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# Solid biofuels — Conversion of analytical results from one basis to another

Biocombustibles solides - Conversion de résultats analytiques d'une base en une autre base



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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.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers ant.
38, Solia to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 238, *Solid biofuels*.

### Introduction

In the ISO Standards covering the analysis of solid biofuels, it is generally specified that the determination is intended to be carried out on the air-dried or in air-equilibrated general analysis test sample prepared 78L somet. etimes st. y", and "dry, according to EN 14780. However, in making use of these analyses, it is necessary to express the results on dry basis and sometimes, also on some other basis. The bases in common use for solid biofuels are "air-dried" (sometimes stated as "as determined"), "as received" (sometimes stated "as sampled" or "as delivered"), "dry", and "dry, ash free".

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## Solid biofuels — Conversion of analytical results from one basis to another

#### 1 Scope

This International Standard gives formulae which allow analytical data relating to solid biofuels to be expressed on the different bases in common use. Consideration is given to corrections that can be applied to certain determined values for solid biofuels prior to their calculation to other bases.

In <u>Annex A</u>, tools for integrity checks of analytical results are given. In <u>Annex B</u>, conversion factors for calculation into other units are given. <u>Annex C</u> is a guideline for the use of validation parameters as can be found in ISO/TC 238 analytical standards.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16948:2015, Solid biofuels — Determination of total content of carbon, hydrogen and nitrogen

ISO 16994, Solid biofuels — Determination of total content of sulphur and chlorine

ISO 18122<sup>1)</sup>, Solid Biofuels — Determination of ash content

EN 14918<sup>2</sup>), Solid biofuels — Determination of calorific value

ISO 18134-1<sup>1)</sup>, Solid biofuels — Determination of moisture content — Oven dry method — Part 1: Total moisture - Reference method

ISO 18134-21), Solid biofuels — Determination of moisture content — Oven dry method — Part 2: Total moisture - Simplified method

ISO 18134-3<sup>1)</sup>, Solid biofuels — Determination of moisture content — Oven dry method — Part 3: Moisture in general analysis simple

<sup>1)</sup> To be published.

<sup>2)</sup> To be replaced by ISO 18125.