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Solid recovered fuels — Determination of moisture content using the oven dry method —

Part 3: Moisture in general analysis sample

Combustibles solides de récupération — Détermination de l'humidité par la méthode de séchage à l'étuve —

Partie 3: Humidité de l'échantillon pour analyse générale

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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 300, *Solid recovered fuels*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 343, *Solid recovered fuels,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Solid recovered fuels — Determination of moisture content using the oven dry method —

Part 3: Moisture in general analysis sample

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1 Scope

This document specifies a method for the determination of moisture in a general analysis sample by drying the sample in an oven. This method is suitable for use for general analysis samples in accordance with CEN/TS 15414-1[3][1)]. It is applicable to all solid recovered fuels.

If solid recovered fuels contain large amounts of oil-fractions the Karl-Fischer-Method (for example ISO 760) is advisable. Otherwise, a lower temperature is recommended (e.g. 50 °C ± 10 °C) and a longer drying time until constant mass is achieved.

NOTE The term moisture content, when used with recovered materials, can be misleading since solid recovered materials, e. g. biomass, frequently contain varying amounts of volatile compounds (extractives) which can evaporate when determining the moisture content of the general analyses sample by oven drying.

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 21637, *Solid recovered fuels — Vocabulary*

ISO 21646[2)], *Solid recovered fuels — Sample preparation*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21637 apply.

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

The analysis sample of solid recovered fuels is dried at a temperature of 105 °C under air atmosphere or nitrogen atmosphere. The percentage of moisture is calculated from the loss in mass of the test sample. If the sample material is susceptible to oxidation (at 105 °C), drying in nitrogen atmosphere is performed.

1) The adoption of the standard series EN 15414 as standard series ISO 21660 is planned. ISO 21660-3 is published in parallel at CEN level as EN 21660-3.

2) Under preparation. Stage at the time of publication: ISO/DIS 21646:2021.

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