

Solid recovered fuels - Determination of moisture content using the oven dry method - Part 3: Moisture in general analysis sample

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15414-3:2011 sisaldab Euroopa standardi EN 15414-3:2011 ingliskeelset teksti.

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English Version

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 - Humidité de l'échantillon pour analyse générale

Feste Sekundärbrennstoffe - Bestimmung des Wassergehaltes unter Verwendung des Verfahrens der Ofentrocknung - Teil 3: Wassergehalt in gewöhnlichen Analysenproben

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Foreword

This document (EN 15414-3:2011) has been prepared by Technical Committee CEN/TC 343 "Solid recovered fuels", the secretariat of which is held by SFS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

This document supersedes CEN/TS 15414-3:2006.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

CEN/TS 15414/EN 15414 *Solid recovered fuels — Determination of moisture content using the oven dry method* consists of the following parts:

- *Part 1: Determination of total moisture by a reference method*
- *Part 2: Determination of total moisture content by a simplified method*
- *Part 3: Moisture in general analysis sample*

This document differs from CEN/TS 15414-3:2006 mainly as follows:

- a) use of automatic equipments under specific conditions permitted;
- b) specification to observe a defined repeatability limit deleted;
- c) results of interlaboratory tests supplemented as an informative Annex A;
- d) whole document editorially revised.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard specifies a method for the determination of moisture in an 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. It is applicable to all solid recovered fuels.

NOTE 1 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.

NOTE 2 This European Standard is based on EN 14774-3.

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.

EN 15357:2011, *Solid recovered fuels — Terminology, definitions and descriptions*

EN 15443, *Solid recovered fuels — Methods for the preparation of the laboratory sample*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15357:2011 apply.

4 Principle

The analysis sample of recovered fuel is dried at a temperature of 105 °C under air atmosphere, nitrogen atmosphere or vacuum conditions. 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 or vacuum conditions is performed.

5 Apparatus

5.1 Drying oven, capable of being controlled at (105 ± 2) °C (see declaration of the manufacturer) and in which the air atmosphere changes between three and five times per hour. The air velocity shall be such that the sample particles are not dislodged from their weighing dish (5.2).

NOTE For the use of vacuum drying oven, see EN 14774-3.

5.2 Weighing dish, of glass or corrosion resistant and temperature resistant material, with a well-fitting lid and of such a size that the sample layer does not exceed 0,2 g/cm².

5.3 Balance, with a sufficient accuracy to weigh the sample to the nearest 0,1 mg.

5.4 Dessicator, to avoid absorption of moisture from the atmosphere to the sample.