

Solid biofuels - Sample preparation

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14780:2011 sisaldab Euroopa standardi EN 14780:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.06.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14780:2011 consists of the English text of the European standard EN 14780:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.07.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 15.06.2011.

The standard is available from Estonian standardisation organisation.

ICS 75.160.10

Standardite reprodutseerimis- ja levitamise õigus kuulub Eesti Standardikeskusele

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English Version

Solid biofuels - Sample preparation

Biocombustibles solides - Préparation des échantillons

Feste Biobrennstoffe - Probenherstellung

This European Standard was approved by CEN on 5 May 2011.

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Foreword

This document (EN 14780:2011) has been prepared by Technical Committee CEN/TC 335 “Solid biofuels”, the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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 supersedes CEN/TS 14780:2005.

This document differs from CEN/TS 14780:2005 mainly as follows:

- a) results of interlaboratory tests are supplemented as informative annexes;
- b) new definitions for sampling are introduced;
- c) a method for determining the minimum number of increments for sampling is included;
- d) the whole document is restructured and editorially revised;
- e) decision schemes are updated;
- f) updated normative references are included.

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 the United Kingdom.

Introduction

Biofuels are a major source of renewable energy. European Standards are needed for production, trade and use of solid biofuels. For sampling and sample preparation of biofuels the following European Standards can be used:

EN 14778, *Solid biofuels – Sampling*

EN 14780, *Solid biofuels – Sample preparation*

This European Standard can be used in regard to production, controlling and analysis of solid biofuels in general.

1 Scope

This European Standard describes methods for reducing combined samples (or increments) to laboratory samples and laboratory samples to sub-samples and general analysis samples and is applicable to solid biofuels.

The methods described in this European Standard may be used for sample preparation, for example, when the samples are to be tested for calorific value, moisture content, ash content, bulk density, durability, particle size distribution, ash melting behaviour, chemical composition, and impurities. The methods are not intended to be applied to the very large samples required for the testing of bridging properties.

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 14588:2010, *Solid biofuels — Terminology, definitions and descriptions*

EN 14774-1, *Solid biofuels — Determination of moisture content — Oven dry method — Part 1: Total moisture — Reference method*

EN 14774-2, *Solid biofuels — Determination of moisture content — Oven dry method — Part 2: Total moisture — Simplified procedure*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14588:2010 and the following apply.

3.1

combined sample

sample consisting of all the increments taken from a sub-lot

NOTE The increments may be reduced by division before being added to the combined sample.

3.2

general analysis sample

sub-sample of a laboratory sample having a nominal top size of 1 mm or less and used for a number of chemical and physical analyses

3.3

increment

portion of fuel extracted in a single operation of the sampling device

3.4

laboratory sample

combined sample or a sub-sample of a combined sample for use in a laboratory

3.5

lot

defined quantity of fuel for which the quality is to be determined

NOTE See also sub-lot.

3.6

moisture analysis sample

sample taken specifically for the purpose of determining total moisture according to EN 14774-1 and EN 14774-2