

<b>STN</b>	<b>Tuhé biopalivá. Stanovenie obsahu vlhkosti. Metóda sušením v sušiarňi. Časť 3: Vlhkosť v analytickej vzorke na všeobecný rozbor (ISO 18134-3: 2015).</b>	<b>STN EN ISO 18134-3</b>  65 7406
------------	---	--

Solid biofuels - Determination of moisture content - Oven dry method - Part 3: Moisture in general analysis sample (ISO 18134-3:2015)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/16

Obsahuje: EN ISO 18134-3:2015, ISO 18134-3:2015

Oznámením tejto normy sa ruší  
STN EN 14774-3 (65 7406) z mája 2010

**122313**

EUROPEAN STANDARD

**EN ISO 18134-3**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2015

ICS 75.160.10

Supersedes EN 14774-3:2009

English Version

## Solid biofuels - Determination of moisture content - Oven dry method - Part 3: Moisture in general analysis sample (ISO 18134-3:2015)

Biocombustibles solides - Méthode de détermination de la teneur en humidité - Méthode de séchage à l'étuve - Partie 3: Humidité de l'échantillon pour analyse générale (ISO 18134-3:2015)

Biogene Festbrennstoffe - Bestimmung des Wassergehaltes - Ofentrocknung - Teil 3: Wassergehalt in allgemeinen Analysenproben (ISO 18134-3:2015)

This European Standard was approved by CEN on 22 August 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**Contents**

Page

**European foreword .....3**

## European foreword

This document (EN ISO 18134-3:2015) has been prepared by Technical Committee ISO/TC 238 "Solid biofuels" in collaboration with 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 March 2016, and conflicting national standards shall be withdrawn at the latest by March 2016.

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 EN 14774-3:2009.

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

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 18134-3:2015 has been approved by CEN as EN ISO 18134-3:2015 without any modification.

---

---

**Solid biofuels — Determination  
of moisture content — Oven dry  
method —**

Part 3:  
**Moisture in general analysis sample**

*Biocombustibles solides — Méthode de détermination de la teneur en  
humidité — Méthode de séchage à l'étuve —*

*Partie 3: Humidité de l'échantillon pour analyse générale*





**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
copyright@iso.org  
www.iso.org

# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>2</b>
<b>5 Apparatus</b> .....	<b>2</b>
<b>6 Sample preparation</b> .....	<b>2</b>
6.1 General.....	2
6.2 Size of test portion.....	3
<b>7 Procedure</b> .....	<b>3</b>
<b>8 Calculation</b> .....	<b>3</b>
<b>9 Performance characteristics</b> .....	<b>4</b>
9.1 Repeatability.....	4
9.2 Reproducibility.....	4
<b>10 Test report</b> .....	<b>4</b>
<b>Bibliography</b> .....	<b>5</b>

## 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](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

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

ISO 18134 consists of the following parts under the general title *Solid biofuels — Determination of moisture content — Oven dry method*:

- *Part 1: Total moisture — Reference method*
- *Part 2: Total moisture — Simplified method*
- *Part 3: Moisture in general analysis sample*

# Solid biofuels — Determination of moisture content — Oven dry method —

## Part 3: Moisture in general analysis sample

### 1 Scope

This part of ISO 18134 describes the method of determining the moisture in the analysis test sample by drying in an oven. It is intended to be used for general analysis samples in accordance with EN 14780. The method described in this part of ISO 18134 is applicable to all solid biofuels. The moisture content of solid biofuels (as received) is always reported based on the total mass of the test sample (wet basis).

Since biofuels in small particle size are very hygroscopic, their moisture content will change with humidity in the atmosphere and therefore, the moisture of the test portion is determined simultaneously with determination of for example calorific value, carbon content, and nitrogen content.

**NOTE** The term moisture content when used with biomass materials can be misleading since untreated biomass frequently contains varying amounts of volatile compounds (extractives) which can evaporate when determining the moisture content by oven drying (see References [1] and [2]).

### 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 16559, *Solid biofuels — Terminology, definitions and descriptions*

EN 14778,<sup>1)</sup> *Solid Biofuels — Sampling*

EN 14780,<sup>2)</sup> *Solid Biofuels — Sample preparation*

ISO 11722, *Solid mineral fuels — Hard coal — Determination of moisture in the general analysis test sample by drying in nitrogen*

**koniec náhl'adu – text ďalej pokračuje v platenej verzii STN**

1) To be replaced by ISO 18135.

2) To be replaced by ISO 14780.