

**Solid biofuels - Fuel quality assurance - Part 5: Firewood
for non-industrial use**

This document is a preview generated by EVS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15234-5:2012 sisaldab Euroopa standardi EN 15234-5:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 15234-5:2012 consists of the English text of the European standard EN 15234-5:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.01.2012.	Date of Availability of the European standard is 18.01.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 75.160.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

ICS 75.160.10

English Version

**Solid biofuels - Fuel quality assurance - Part 5: Firewood for
non-industrial use**

Biocombustibles solides - Assurance qualité du
combustible - Partie 5: Bois de chauffage à usage non
industriel

Feste Biobrennstoffe - Qualitätssicherung von Brennstoffen
- Teil 5: Stückholz für nichtindustrielle Verwendung

This European Standard was approved by CEN on 27 November 2011.

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, 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Symbols and abbreviations	5
5 Quality assurance and quality control measures	6
5.1 General	6
5.2 Traceability	6
5.3 Production requirements	7
5.4 Fuel requirements for the final product (Step 1)	7
5.5 Process description (Steps 2, 3 and 4)	8
5.6 Measures to assure the quality of the product (Step 5)	9
5.6.1 Inspection of incoming raw material and other goods	9
5.6.2 Firewood production	10
5.6.3 Distribution	10
5.7 Routines for separate handling of nonconforming materials and solid biofuels (Step 6)	10
6 Product declaration of fuel quality and labelling	11
Annex A (informative) Examples of product declarations	12
Bibliography	14

Foreword

This document (EN 15234-5:2012) 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 July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

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.

The European standard series EN 15234, *Solid biofuels — Fuel quality assurance* are provided as a general requirements and additional product standards. Additional product standards may extend this series over time.

EN 15234 consists of the following parts, under the general title *Solid biofuels — Fuel quality assurance*:

- *Part 1: General requirements;*
- *Part 2: Wood pellets for non-industrial use;*
- *Part 3: Wood briquettes for non-industrial use;*
- *Part 4: Wood chips for non-industrial use;*
- *Part 5: Firewood for non-industrial use;*
- *Part 6: Non-woody pellets for non-industrial use.*

Although these product standards may be obtained separately, it should be recognized that they require an understanding of the standards based on and supporting EN 15234-1. It is recommended to obtain and use EN 15234-1 in conjunction with these standards.

NOTE In these product standards, non-industrial use means - use in smaller scale appliances, such as in households, in small commercial and public sector buildings.

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, Turkey and United Kingdom.

Introduction

The overall aim of this European Standard is to guarantee the firewood quality through the whole supply chain, from the origin to the delivery of the solid biofuel and provide adequate confidence that specified quality requirements are fulfilled.

The objective of this European Standard is to serve as a tool to enable the efficient trading of firewood. Thereby:

- 1) the end-user can find firewood that corresponds to its needs;
- 2) the producer/supplier can produce firewood with defined and consistent properties and describe firewood to the customers.

Quality assurance measures should establish confidence in firewood through systems that are simple to operate and which do not cause undue bureaucracy.

Firewood is specified according to EN 14961-5, *Solid biofuels — Fuel specifications and classes — Part 5: Firewood for non-industrial use*.

1 Scope

This European Standard defines the procedures to fulfil the quality requirements (quality control) and describes measures to ensure adequate confidence that specification of firewood described in EN 14961-5 is fulfilled (quality assurance). This European Standard covers the raw material supply, production and delivery chain, from purchasing of raw materials to point of delivery to the end-user.

This European standard covers only quality assurance for firewood produced from the woody biomasses stated in EN 14961-1:2010, Table 1 and EN 14961-5.

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 14961-1:2010, *Solid biofuels — Fuel specifications and classes — Part 1: General requirements*

EN 14961-5:2011, *Solid biofuels — Fuel specifications and classes — Part 5: Firewood for non-industrial use*

EN 15234-1, *Solid biofuels — Fuel quality assurance — Part 1: General requirements*

NOTE In EN 14961-1:2010 there are listed Normative references of the European Standards for sampling and sample reduction and in EN 14961-5:2011 for determination of solid biofuel properties.

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

firewood

cut and split oven-ready fuelwood used in household wood burning appliances like stoves, fireplaces and central heating systems

NOTE Firewood usually has a uniform length, typically in a range of 150 mm to 1 000 mm.

3.2

impurities

material other than the raw material or fuel itself, such as soil, stones, metal, plastic, glass

3.3

weather condition

temperature, humidity and precipitation, e.g. rain, snow

4 Symbols and abbreviations

The symbols and abbreviations used in this European Standard comply with the SI system of units as far as possible.

d dry (dry basis)

ar as received