National Standards Authority of Ireland

IRISH STANDARD

I.S. CEN/TS 15440:2006

ICS 75.160.10

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
http://www.nsai.ie

Sales
http://www.standards.ie

SOLID RECOVERED FUELS - METHOD FOR THE DETERMINATION OF BIOMASS CONTENT

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:

22 January 2007

Price Code M

Údarás um Chaighdeáin Náisiúnta na hÉireann

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

CEN/TS 15440

November 2006

ICS 75.160.10

English Version

Solid recovered fuels - Method for the determination of biomass content

Combustibles solides de récupération - Méthode de détermination de la teneur en biomasse

Feste Sekundärbrennstoffe - Verfahren zur Bestimmung des Gehaltes an Biomasse

This Technical Specification (CEN/TS) was approved by CEN on 13 May 2006 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, 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.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. CEN/TS 15440:2006: E

Contents

Page

Foreword

This document (CEN/TS 15440:2006) has been prepared by Technical Committee CEN/TC 343 “Solid recovered fuels”, the secretariat of which is held by SFS.

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 Technical Specification is one of a series of technical specifications dealing with solid recovered fuels.

Solid recovered fuels are defined in the EU Commission Mandate M/325 to CEN. The mandate makes reference to Directive 2001/77/EC, 2000/76/EC and Commission Decision 2000/532/EC. In the Mandate M/325 solid recovered fuels are defined as fuels prepared from non hazardous waste to be utilised for energy recovery in waste incineration or co-incineration plants regulated under Community environmental legislation.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, 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

This Technical Specification specifies the methods used for the determination of biomass (as defined in 3.3) content in solid recovered fuels. The RES-E directive [1] aims to promote electricity produced from renewable resources, including e.g. the biomass fraction present in solid waste. This Technical Specification specifies two normative methods and one informative method for the determination of biomass content in solid recovered fuels, including the method of selective dissolution in sulphuric acid, the manual sorting method and the informative reductionistic method. The reductionistic method is for internal control and specific agreements only, see Annex F. The two latter methods are both based on the first one, the selective dissolution method. As the selective dissolution method is not applicable to some materials usually or possibly present in SRF, the limitations of this method have to be considered (see Annex G), and attention needs to be paid to possible misuse in SRF mixtures of unknown origin.

NOTE An alternative method could be the C-14 method to determine the biomass content expressed in percentage by carbon content. The method is currently in its early stages of development, but in the future it may be used as an alternative method to determine the biomass content expressed in percentage by carbon content.

This Technical Specification is primarily geared toward laboratories, producers, suppliers and purchasers of solid recovered fuels, but is also useful for the authorities and inspection organizations.

CEN/TR 14980 shows that biogenic/biodegradable fractions can be estimated using the methods described in this Technical Specification. The fraction of biomass (biodegradable/biogenic fractions) can be expressed:

— by weight;

— by energy content (net or gross calorific value);

— by carbon content.