

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 14918

May 2005

ICS 75.160.10

English version

Solid Biofuels - Method for the determination of calorific value

Biocombustibles solides - Méthode pour la détermination
du pouvoir calorifique

Feste Biobrennstoffe - Verfahren Zur Bestimmung des
Heizwertes

This Technical Specification (CEN/TS) was approved by CEN on 16 August 2004 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, 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

Contents

	page
Contents	2
Foreword.....	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Principle.....	7
5 Reagents.....	7
6 Apparatus	8
7 Preparation of test sample.....	11
8 Calorimetric procedure	12
9 Calibration	18
10 Gross calorific value	24
11 Precision.....	28
12 Calculation of net calorific value at constant pressure.....	29
13 Test report	30
Annex A (normative) Adiabatic bomb calorimeters	32
Annex B (normative) Isoperibol and static-jacket bomb calorimeters.....	36
Annex C (normative) Automated bomb calorimeters	42
Annex D (informative) Checklists for the design and procedures of combustion experiments	45
Annex E (informative) Examples to illustrate the main calculations used in this Technical Specification when an automated (adiabatic) bomb calorimeter is used for determinations	50
Annex F (informative) List of symbols used in this Technical Specification	54
Annex G (informative) Key-word index	57
Annex H (informative) Default values of most used biofuels for the calculations of calorific values.....	61
Annex I (informative) Flow chart for a routine calorific value determination.....	62