SLOVENSKI STANDARD
SIST EN ISO 23343-1:2021

01-julij-2021

Trdna biogoriva - Določevanje sorpcije vode in njenega vpliva na trajnost toplotno obdelanih goriv iz biomase - 1. del: Peleti (ISO 23343-1:2021)

Solid biofuels - Determination of water sorption and its effect on durability of thermally treated biomass fuels - Part 1: Pellets (ISO 23343-1:2021)

Biogene Festbrennstoffe - Bestimmung der Sorption und deren Auswirkung auf die Dauerhaftigkeit von thermisch behandelten Brennstoffen aus Biomasse - Teil 1: Pellets (ISO 23343-1:2021)

Biocombustibles solides - Détermination de la sorption d'eau et de son influence sur la durabilité des combustibles de biomasse traités thermiquement - Partie 1: Granulés (ISO 23343-1:2021)

Ta slovenski standard je istoveten z: **EN ISO 23343-1:2021**

ICS:

75.160.40	Biogoriva	Biofuels

SIST EN ISO 23343-1:2021 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 23343-1

May 2021

ICS 27.190; 75.160.40

English Version

Solid biofuels - Determination of water sorption and its effect on durability of thermally treated biomass fuels - Part 1: Pellets (ISO 23343-1:2021)

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This European Standard was approved by CEN on 1 May 2021.

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Ref. No. EN ISO 23343-1:2021 E

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European foreword

This document (EN ISO 23343-1:2021) 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of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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The text of ISO 23343-1:2021 has been approved by CEN as EN ISO 23343-1:2021 without any modification.

INTERNATIONAL STANDARD

ISO 23343-1

First edition
2021-04

Solid biofuels — Determination of water sorption and its effect on durability of thermally treated biomass fuels —

Part 1: Pellets

Biocombustibles solides — Détermination de la sorption d'eau et de son influence sur la durabilité des combustibles de biomasse traités thermiquement —

Partie 1: Granulés

Reference number
ISO 23343-1:2021(E)

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Published in Switzerland

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Foreword

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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).

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This document was prepared by Technical Committee ISO/TC 238, *Solid biofuels*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 335, *Solid biofuels*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Thermally treated biomass fuels, particularly in compressed form, are increasingly considered as a replacement of fossil coal or for co-firing in large energy plants for production of heat and/or power. Compressed biomass fuels which are not thermally treated easily absorb moisture; this compromises the durability and generates fines. Thermally treated biomass fuels vary in their affinity to absorb moisture (absorption and/or adsorption – here collectively called sorption) depending on the extent and/or type of thermal treatment, feedstock used to make the product, compression, potential additives used, etc. For this purpose, it is important to understand the degree to which thermally treated compressed solid biofuels are resistant to moisture uptake and the degree to which they maintain durability when exposed to moisture, primarily in the form of rain during outdoor storage.

Thermally treated biomass fuel such as pellets or briquettes may be classified based on these characteristics as suitable or unsuitable to be handled and stored under conditions with limited or no weather protection. This document was developed specifically for the classification of pellets and is not intended to be applicable to other forms of densified fuel (e.g. briquettes). It is intended that other parts will be developed as necessary to apply these principles to other forms of thermally treated biomass fuels.

It should be noted that in large-scale storage of thermally treated biomass fuels the degree of wetting will likely vary within the storage. Therefore, this document is not intended to be used to draw conclusions on the average degree of wetting for any particular storage, but rather provides an indication of the degree to which durability and/or moisture content can be affected under worst case conditions. This method can be used for comparative purposes towards other pelletized thermally treated biomass fuels.