

<b>STN</b>	<b>Tuhé biopalivá</b> <b>Stanovenie obsahu ťažkého cudzorodého</b> <b>materiálu s veľkosťou viac ako 3,15 mm (ISO</b> <b>19743: 2017)</b>	<b>STN</b> <b>EN ISO 19743</b>  65 7424
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Solid biofuels - Determination of content of heavy extraneous materials larger than 3,15 mm (ISO 19743:2017)

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. 10/17

Obsahuje: EN ISO 19743:2017, ISO 19743:2017

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017  
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

EUROPEAN STANDARD

EN ISO 19743

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2017

ICS 27.190; 75.160.40

English Version

## Solid biofuels - Determination of content of heavy extraneous materials larger than 3,15 mm (ISO 19743:2017)

Biocombustibles solides - Dosage de la teneur en matériaux lourds exogènes de dimension supérieure à 3,15 mm (ISO 19743:2017)

Biogene Festbrennstoffe - Bestimmung des Gehaltes an schweren Fremdstoffen mit einer Partikelgröße von mehr als 3,15 mm (ISO 19743:2017)

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN ISO 19743:2017) 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of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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.

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### Endorsement notice

The text of ISO 19743:2017 has been approved by CEN as EN ISO 19743:2017 without any modification.

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**Solid biofuels — Determination of  
content of heavy extraneous materials  
larger than 3,15 mm**

*Biocombustibles solides — Dosage de la teneur en matériaux lourds  
exogènes de dimension supérieure à 3,15 mm*





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## 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)).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 238, *Solid biofuels*.



## Introduction

Determination of content of heavy extraneous materials larger than 3,15 mm top size is important when evaluating the suitability of using biomass as biofuel. Stones and other impurities contained in biomass from stumps, roots, mill residue and harvest and landscape management residues may cause problems during size reduction, as well as during combustion.

Impurities smaller than 3,15 mm are not considered as part of this testing method but may still contribute to the ash content.



# Solid biofuels — Determination of content of heavy extraneous materials larger than 3,15 mm

## 1 Scope

This document specifies a method for the determination of content of heavy extraneous materials larger than 3,15 mm by the use of sink-and-float separation combined with elutriation. This document is applicable to woody biomass in accordance with ISO 17225-1:2014, Table 1.

NOTE 1 This method is designed to determine the level of impurities larger than 3,15 mm top size with a specific density  $>1 \text{ g/cm}^3$  such as stones, glass, rubber, metal and certain types of plastics.

NOTE 2 During the processing of the sample, hand sorting of light impurities with a specific density  $\leq 1 \text{ g/cm}^3$  (e.g. plastic foil) can also be done.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 3310-2, *Test sieves — Technical requirements and testing — Part 2: Test sieves of perforated metal plate*

ISO 14780, *Solid biofuels — Sample preparation*

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

ISO 18134-1, *Solid biofuels — Determination of moisture content — Oven dry method — Part 1: Total moisture — Reference method*

ISO 18134-2, *Solid biofuels — Determination of moisture content — Oven dry method — Part 2: Total moisture — Simplified method*

ISO 18135, *Solid biofuels — Sampling*

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