
Solid biofuels — Vocabulary

Biocombustibles solides — Vocabulaire



This document is a preview generated by EUS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
Annex A (informative) Scheme of sample hierarchy	27
Bibliography	29

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

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).

This second edition cancels and replaces the first edition (ISO 16559:2014), which has been technically revised. The main changes are as follows:

- [Clause 3](#) has been updated;
- the title of this document has been changed;
- [Annex A](#) has been added.

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

Some of the terms included in this document are only used in particular countries.

In this document, terms for virgin biomass, residue, and by-product are used to describe co-products from forestry, arboriculture, agriculture, horticulture and aquaculture as well as related virgin biomass industries. The terms and definitions are harmonized as far as possible with the current language used in management as well as in regulatory activities.

This document only contains terms used to describe solid biofuels within the scope of ISO/TC 238, see [Figure 1](#).

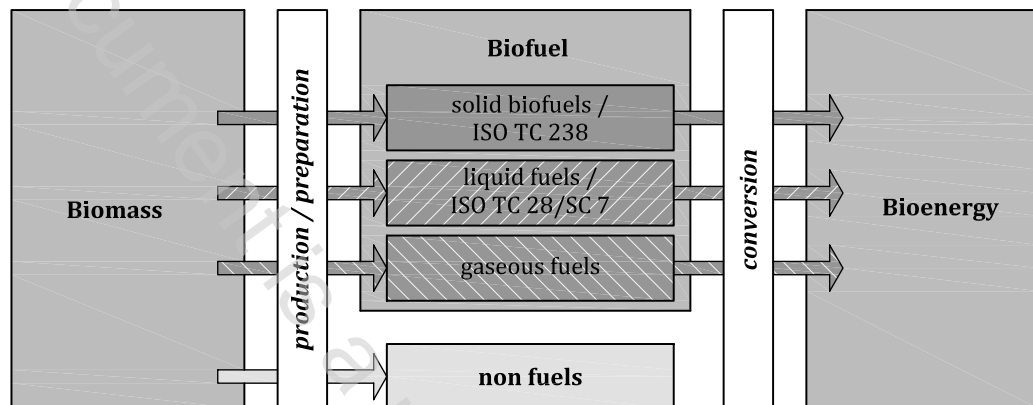


Figure 1 — ISO/TC 238 within the biomass-biofuel-bioenergy field

Solid biofuels are produced from different sources. Terms and definitions are categorized in a logical structure based on the fact that solid biofuels are produced from different sources and that solid biofuels are used to produce bioenergy:

- origin and source of solid biofuels in the overall supply chain;
- the different traded forms as well as the different forms of biofuels produced within the preparation processes;
- the most relevant solid biofuel properties and terms of sampling and testing as well as classification and specification;
- the description of the solid biofuels itself as well as their handling and processing given in the same structure as the biomass sources;
- bioenergy as the result of solid biofuel conversion.

Appropriate terms for sampling and testing as well as classification and specification of properties should be defined and described together with the category source/origin, type and properties of solid biofuels. The inclusion of terms defined in this document is, in many cases, based on the detailed classification system of solid biofuels given in ISO 17225-1.

Solid biofuels — Vocabulary

1 Scope

This document establishes a vocabulary for solid biofuels. This document only includes raw and processed material originating from

- forestry and arboriculture,
- agriculture and horticulture, and
- aquaculture.

NOTE 1 Chemically treated material cannot include halogenated organic compounds or heavy metals at levels higher than those in typical virgin material values (see also ISO 17225-1:2021, Annex B) or higher than typical values of the country of origin.

NOTE 2 Raw and processed material includes woody, herbaceous, fruit and aquatic biomass and biodegradable waste originating from above sectors.

Materials originating from different recycling processes of end-of-life-products are outside the scope of this document but relevant terms are included for information. Liquid biofuels (ISO/TC 28/SC 7), natural gas (ISO/TC 193) and solid recovered fuels (ISO/TC 300) are outside the scope of this document.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

absorption

phenomenon whereby atoms, ions, or molecules from a gas, liquid, or dissolved solid permeates or is dissolved by a liquid or solid (the absorbent)

Note 1 to entry: *Adsorption* (3.3) is a surface-based process while *absorption* involves the whole volume (3.214) of the material.

3.2

additive

material which has been intentionally introduced into the fuel *feedstock* (3.86) to improve *quality* (3.160) of *fuel* (3.99) (e.g. combustion or durability properties), to reduce emissions or to make production more efficient

Note 1 to entry: Trace amounts of, e.g. grease or other lubricants that are introduced into the *fuel* (3.99) processing stream as part of typical mill operations are not considered as additives.

[SOURCE: ISO 17225-2:2021, 3.1]