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Plastics — Carbon and environmental footprint of biobased plastics —

Part 1: General principles

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Contents

Page

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).

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

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.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 14, *Enviromental aspects*.

A list of all parts in the ISO 22526 series can be found on the ISO website.

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

Increased use of biomass resources for manufacturing plastic products can be effective in reducing global warming and the depletion of fossil resources.

Current plastic products are composed of biobased synthetic polymers, fossil-based synthetic polymers, natural polymers and additives that can include biobased materials.

Biobased plastics refer to plastics that contain materials wholly or partly of biogenic origin.

Plastics — Carbon and environmental footprint of biobased plastics —

Part 1: General principles

1 Scope

This document specifies the general principles and the system boundaries for the carbon and environmental footprint of biobased plastic products. It is an introduction and a guidance document to the other parts of the ISO 22526 series.

This document is applicable to plastic products and plastic materials, polymer resins, which are based from biobased or fossil-based constituents.

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 472, *Plastics — Vocabulary*

ISO 14020, *Environmental labels and declarations — General principles*

ISO 14040, *Environmental management — Life cycle assessment — Principles and framework*

ISO 14044, *Environmental management — Life cycle assessment — Requirements and guidelines*

ISO 14067, *Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification*

ISO 16620-1, *Plastics — Biobased content — Part 1: General principles*

ISO 16620-2, *Plastics — Biobased content — Part 2: Determination of biobased carbon content*

ISO 16620-3, *Plastics — Biobased content — Part 3: Determination of biobased synthetic polymer content*

ISO 16620-4, *Plastics — Biobased content — Part 4: Determination of biobased mass content*

ISO 16620-5, *Plastics — Biobased content — Part 5: Declaration of biobased carbon content, biobased synthetic polymer content and biobased mass content*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 472, ISO 14067, ISO 16620-1, ISO 16620-2, ISO 16620-3, ISO 16620-4, ISO 16620-5 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/