Irish Standard
I.S. EN ISO 22526-2:2021

Plastics - Carbon and environmental footprint of biobased plastics - Part 2: Material carbon footprint, amount (mass) of CO2 removed from the air and incorporated into polymer molecule (ISO 22526-2:2020)

I.S. EN ISO 22526-2:2021

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National Foreword

I.S. EN ISO 22526-2:2021 is the adopted Irish version of the European Document EN ISO 22526-2:2021, Plastics - Carbon and environmental footprint of biobased plastics - Part 2: Material carbon footprint, amount (mass) of CO2 removed from the air and incorporated into polymer molecule (ISO 22526-2:2020)

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 22526-2

November 2021

ICS 13.020.40; 83.080.01

English Version

Plastics - Carbon and environmental footprint of biobased plastics - Part 2: Material carbon footprint, amount (mass) of CO2 removed from the air and incorporated into polymer molecule (ISO 22526-2:2020)

Plastiques - Empreinte carbone et environnementale des plastiques biosourcés - Partie 2: Empreinte carbone des matériaux, quantité (masse) de CO2 captée dans l'air et incorporée dans les molécules de polymères (ISO 22526-2:2020)

Kunststoffe - Kohlenstoff- und Umweltbilanz von biobasierten Kunststoffen - Teil 2: Kohlenstoffbilanz des Materials, Menge (Masse) des aus der Luft entfernten und in das Polymermolekül integrierten CO2 (ISO 22526 2:2020)

This European Standard was approved by CEN on 8 November 2021.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

The text of ISO 22526-2:2020 has been prepared by Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 22526-2:2021 by Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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 May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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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Endorsement notice

The text of ISO 22526-2:2020 has been approved by CEN as EN ISO 22526-2:2021 without any modification.

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INTERNATIONAL STANDARD

ISO 22526-2

First edition
2020-03

Plastics — Carbon and environmental footprint of biobased plastics —

Part 2: Material carbon footprint, amount (mass) of CO_2 removed from the air and incorporated into polymer molecule

Plastiques — Empreinte carbone et environnementale des plastiques biosourcés —

Partie 2: Empreinte carbone des matériaux, quantité (masse) de CO_2 captée dans l'air et incorporée dans les molécules de polymères

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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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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 61, *Plastics*, Subcommittee SC 14, *Environmental 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.

INTERNATIONAL STANDARD ISO 22526-2:2020(E)

Plastics — Carbon and environmental footprint of biobased plastics —

Part 2: Material carbon footprint, amount (mass) of CO_2 removed from the air and incorporated into polymer molecule

1 Scope

This document defines the material carbon footprint as the amount (mass) of CO_2 removed from the air and incorporated into plastic, and specifies a determination method to quantify it.

This document is applicable to plastic products, plastic materials and polymer resins that are partly or wholly based on biobased 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 16620-1, *Plastics — Biobased content — Part 1: General principles*

ISO 16620-2:2019, *Plastics — Biobased content — Part 2: Determination of biobased carbon content*

ISO 16620-3:2015, *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, definitions, symbols and abbreviated terms

3.1 Terms and definitions

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